

SYNERGISTIC BACTERIAL COMPOSITIONS AND METHODS OF PRODUCTION AND USE THEREOF

CROSS REFERENCE TO RELATED APPLICATIONS

[001] This patent application claims the benefit of U.S. Provisional Patent Application Serial No. 61/729,518, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,519, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,520, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,521, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,522, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,524, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,515, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,517, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,525, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,526, filed November 23, 2012, U.S. Provisional Patent Application Serial No. 61/729,527, filed November 23, 2012 all of which are incorporated herein by reference in their entirety for all purposes.

REFERENCE TO A SEQUENCE LISTING

[002] This application includes a Sequence Listing submitted electronically as a text file named 24845_US_CRF_sequence_listing.txt, created on November 25, 2013, with a size of 2,945,024 bytes. The sequence listing is incorporated by reference.

INTRODUCTION

[003] Mammals are colonized by microbes in the gastrointestinal (GI) tract, on the skin, and in other epithelial and tissue niches such as the oral cavity, eye surface and vagina. The gastrointestinal tract harbors an abundant and diverse microbial community. It is a complex system, providing an environment or niche for a community of many different species or organisms, including diverse strains of bacteria. Hundreds of different species may form a commensal community in the GI tract in a healthy person, and this complement of organisms evolves from the time of birth to ultimately form a functionally mature microbial population by about 3 years of age. Interactions between microbial strains in these populations and between microbes and the host, *e.g.* the host immune system, shape the community structure, with availability of and

competition for resources affecting the distribution of microbes. Such resources may be food, location and the availability of space to grow or a physical structure to which the microbe may attach. For example, host diet is involved in shaping the GI tract flora.

[004] A healthy microbiota provides the host with multiple benefits, including colonization resistance to a broad spectrum of pathogens, essential nutrient biosynthesis and absorption, and immune stimulation that maintains a healthy gut epithelium and an appropriately controlled systemic immunity. In settings of 'dysbiosis' or disrupted symbiosis, microbiota functions can be lost or deranged, resulting in increased susceptibility to pathogens, altered metabolic profiles, or induction of proinflammatory signals that can result in local or systemic inflammation or autoimmunity. Thus, the intestinal microbiota plays a significant role in the pathogenesis of many diseases and disorders, including a variety of pathogenic infections of the gut. For instance, patients become more susceptible to pathogenic infections when the normal intestinal microbiota has been disturbed due to use of broad-spectrum antibiotics. Many of these diseases and disorders are chronic conditions that significantly decrease a patient's quality of life and can be ultimately fatal.

[005] Fecal transplantation has been shown to be an effective treatment for patients suffering from severe or refractory GI infections by repopulating the gut with a diverse array of microbes that control key pathogens by creating an ecological environment inimical to their proliferation and survival. Such approaches have demonstrated significant potential to decrease host susceptibility to infection. Fecal transplantation, however, is considered to be a procedure of last resort because it has the potential to transmit infectious or allergenic agents between hosts, involves the transmission of potentially hundreds of unknown strains from donor to patient, and is difficult to perform on a mass scale. Additionally, fecal transplantation is inherently nonstandardized and different desired and/or undesired material may be transmitted in any given donation. Fecal transplantation is not approved by the FDA and is unlikely to gain approval since the product cannot be standardized and characterized according to regulatory requirements for identity, potency, purity and safety. Thus, there is a need for defined compositions that can be used to decrease susceptibility to infection and/or that facilitate restoration of a healthy gut microbiota.

[006] Thus practitioners have a need for a much safer and reproducible treatment for disorders currently treated on an experimental (non-FDA approved) basis using fecal transplantation. In order to prepare a therapeutic with commercial potential,

we have designed bacterial compositions of isolated bacterial strains with a plurality of beneficial properties based on our understanding of those bacterial strains and our analysis of the properties that would enhance the utility and commercialization of a bacterial composition.

[007] Therefore, in response to the need for durable, efficient, and effective compositions and methods for treatment of GI diseases, in particular serious pathogenic infections, by way of restoring or enhancing microbiota functions, we address these and other shortcomings of the prior art by providing compositions and methods for treating patients.

SUMMARY

[008] In one aspect, provided are compositions comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium capable of forming a spore and a second type of isolated bacterium capable of forming a spore, wherein the first type and the second type are not identical, and wherein at least one of the first type and the second type are capable of decreasing and/or inhibiting the growth and/or colonization of at least one type of pathogenic bacteria. In an embodiment, the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria. In an embodiment, the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria and at least 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria and at least 2 of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises: i) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria capable of forming spores, ii) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria not known to be capable of forming spores, or iii) any combination of i) and ii). In an embodiment, the first type and the second type are present in the composition in approximately equal concentrations. In an embodiment, the first type and the second type are present in the composition in not substantially equal concentrations. In an embodiment, the first type is present in the composition in at least about 150% the concentration of the second type, or wherein the second type is present in the composition in at least about 150% the concentration of the first type. In an embodiment, the composition consists essentially of: i) between two and about twenty

types of isolated bacteria, wherein at least two types of isolated bacteria are independently capable of spore formation; ii) between two and about twenty types of isolated bacteria, wherein at least two types of isolated bacteria not known to be capable of spore formation, or iii) any combination of i) and ii). In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium are selected from Table 1. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium comprise an operational taxonomic unit (OTU) distinction. In an embodiment, the OTU distinction comprises 16S rRNA sequence similarity below about 95% identity. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium independently comprise bacteria that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3. In an embodiment, a combination of the first type and the second type are: i) cytotoxic, ii) cytostatic, iii) capable of decreasing the growth of the pathogenic bacterium, iv) capable of inhibiting the growth of the pathogenic bacterium, v) capable of decreasing the colonization of the pathogenic bacterium, vi) capable of inhibiting the colonization of the pathogenic bacterium, or vii) any combination of i)-vi). In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacteria present at a concentration at least equal to the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type. In an embodiment, the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE). In an embodiment, the first type and the second type synergistically

interact. In an embodiment, the first type and the second type synergistically interact to inhibit the pathogenic bacterium.

[009] In another aspect, provided are compositions comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein only one of the first type and the second type are capable of forming a spore, and wherein at least one of the first type and the second type are capable of decreasing the growth and/or colonization of at least one type of pathogenic bacteria.

[010] In another aspect, provided are compositions comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein the first type and the second type are not spores or known to be capable of forming a spore, and wherein at least one of the first type and the second type are capable of decreasing the growth and/or colonization of at least one type of pathogenic bacteria.

[011] In an embodiment, at least one of the first type and the second type are capable of reducing the growth rate of at least one type of pathogenic bacteria. In an embodiment, at least one of the first type and the second type are cytotoxic to at least one type of pathogenic bacteria. In an embodiment, at least one of the first type and the second type are cytostatic to at least one type of pathogenic bacteria. In an embodiment, the first type and the second type are selected from Table 1. In an embodiment, the first type and the second type comprise different species. In an embodiment, the first type and the second type comprise different genera. In an embodiment, the first type and the second type comprise different families. In an embodiment, the first type and the second type comprise different orders.

[012] In another aspect, provided are compositions comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein: i) the first type and the second type are independently capable of forming a spore; ii) only one of the first type and the second type are capable of forming a spore or iii) neither the first type nor the second type are capable of forming a spore, wherein the first type and the second type are not identical, wherein the first type and the second type are capable of functionally populating the gastrointestinal tract of a human subject to whom the composition is administered. In an embodiment, the functional populating of the gastrointestinal tract comprises preventing a dysbiosis of the gastrointestinal tract. In an embodiment, the

functional populating of the gastrointestinal tract comprises treating a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing the severity of a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing one or more symptoms of a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises preventing growth and/or colonization of the gastrointestinal tract by a pathogenic bacterium. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing growth and/or colonization of the gastrointestinal tract by a pathogenic bacterium. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing the number of one or more types of pathogenic bacteria in the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises increasing the number of one or more non-pathogenic bacteria in the gastrointestinal tract. In an embodiment, the bacterial composition comprises 0, 1, 2, 3 or greater than 3 types of isolated bacteria capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria capable of forming spores. In an embodiment, the bacterial composition comprises at least about 7 types of isolated bacteria capable of forming spores. In an embodiment, the first type and the second type are present in the composition in not substantially equal concentrations. In an embodiment, the first type and the second type are present in the composition in approximately equal concentrations. In an embodiment, the first type is present in the composition in at least about 150% the concentration of the second type. In an embodiment, the second type is present in the composition in at least about 150% the concentration of the first type. In an embodiment, the composition consists essentially of between two and about ten types of isolated bacteria, wherein at least one type of isolated bacteria are independently capable of spore formation. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium are selected from Table 1. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium comprise an operational taxonomic unit (OTU) distinction. In an embodiment, the OTU distinction comprises 16S rRNA sequence similarity below about 95% identity. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium independently comprise bacteria that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3. In an embodiment, a combination of the first type and the second type are cytotoxic or

cytostatic to the pathogenic bacterium. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacteria present at a concentration at least equal to the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacteria present at a concentration at least about ten times the concentration of the combination of the first type and the second type. In an embodiment, the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE). In an embodiment, the first type and the second type synergistically interact to be cytotoxic to the pathogenic bacterium. In an embodiment, wherein the first type and the second type synergistically interact to be cytostatic to the pathogenic bacterium.

[013] In another aspect, provided are single dose units comprising the compositions of the present invention. In an embodiment, the dose unit comprises at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of either spores or vegetative bacterial cells. In an embodiment, the dose unit comprises a pharmaceutically acceptable excipient, an enteric coating or a combination thereof. In an embodiment, the dose unit further comprises a drug selected from corticosteroids, mesalazine, mesalamine, sulfasalazine, sulfasalazine derivatives, immunosuppressive drugs, cyclosporin A, mercaptopurine, azathiopurine, prednisone, methotrexate, antihistamines, glucocorticoids, epinephrine, theophylline, cromolyn sodium, anti-leukotrienes, anti-cholinergic drugs for rhinitis, anti-cholinergic decongestants, mast-cell stabilizers, monoclonal anti-IgE antibodies, vaccines, and combinations thereof. In an embodiment, the dose unit is formulated for oral administration, rectal administration, or the combination of oral and rectal administration, or is formulated for topical, nasal or inhalation administration.

[014] In another aspect, provided are kits comprising in one or more containers: a first purified population of a first type of bacterial spores substantially free of viable vegetal bacterial cells; and a second purified population of a second type of bacterial spores substantially free of viable vegetal bacterial cells, wherein the first type and the second type of bacterial spores are not identical, and wherein the first type and the second type of bacterial spores, when co-localized in a target region of a gastrointestinal tract of a human subject in need thereof, are capable of functionally populating the gastrointestinal tract. In an embodiment, the first purified population and the second purified population are present in a single container. In an embodiment, the first purified population and the second purified population are present in two containers. In an embodiment, the first purified population and the second purified population are lyophilized or substantially dehydrated. In an embodiment, the kit further comprises in one or more containers an effective amount of an anti-bacterial agent, an effective amount of an anti-viral agent, an effective amount of an anti-fungal agent, an effective amount of an anti-parasitic agent, or a combination thereof in one or more containers. In an embodiment, the kit further comprises a pharmaceutically acceptable excipient or diluent.

[015] Also provided are pharmaceutical formulations comprising an effective amount of the compositions of the invention, and further comprising an effective amount of an anti-bacterial agent, an effective amount of an anti-fungal agent, an effective amount of an anti-viral agent, an effective amount of an anti-parasitic agent.

[016] Also provided are comestible products comprising a first purified population of a first type of bacterial spores and a second purified population of a second type of bacterial spores, wherein the first type and the second type of bacterial spores are not identical, wherein the comestible product is substantially free of viable vegetal bacterial cells, and wherein the first type and the second type of bacterial spores, when administered to a human subject in need thereof, are capable of functionally populating the gastrointestinal tract of the human subject. In an embodiment, the comestible product comprises a food or food additive, a beverage or beverage additive, or a medical food. In an embodiment, the comestible product comprises at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of viable spores. In an embodiment, the comestible product comprises a first type of bacterial spores and a second type of bacterial spores selected from Table 1, or where the first type of bacterial spores and

the second type of bacterial spores independently comprise bacterial spores that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.

[017] Also provided are methods comprising administering to a human subject in need thereof an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein: the first type and the second type are independently capable of forming a spore; only one of the first type and the second type are capable of forming a spore or neither the first type nor the second type are capable of forming a spore, wherein the first type and the second type are not identical, and wherein at least one of the first type and the second type exert an inhibitory-effect on a pathogenic bacterium present in the gastrointestinal tract of the human subject, such that the number of pathogenic bacteria present in the gastrointestinal tract is not detectably increased or is detectably decreased over a period of time. In an embodiment, the human subject is diagnosed as having a dysbiosis of the gastrointestinal tract. In an embodiment, wherein the human subject is diagnosed as infected with a pathogenic bacterium selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE). In an embodiment, the bacterial composition is administered simultaneously with i) an antibiotic, ii) a prebiotic, or iii) a combination of i) and ii). In an embodiment, the bacterial composition is administered prior to administration of i) an antibiotic, ii) a prebiotic, or iii) a combination of i) and ii). In an embodiment, the bacterial composition is administered subsequent to administration of i) an antibiotic, ii) a prebiotic, or iii) a combination of i) and ii). In an embodiment, the number of pathogenic bacterium present in or excreted from the gastrointestinal tract of the human subject is detectably reduced within one month, within two weeks, or within one week of administration of the bacterial composition. In an embodiment, the number of pathogenic bacterium present in or excreted from the gastrointestinal tract of the human subject is detectably reduced within three days, two days or one day of administration of

the bacterial composition. In an embodiment, the human subject is detectably free of the pathogenic bacterium within one month, two weeks, one week, three days or one day of administration of the bacterial composition. In an embodiment, the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria. In an embodiment, the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria and at least 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria and at least 2 of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises: i) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria capable of forming spores, ii) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria not known to be capable of forming spores, or iii) any combination of i) and ii). In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria and at least 1 of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria and at least 1 of the isolated bacteria is not capable of forming spores. In an embodiment, the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria, wherein i) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are capable of forming spores, ii) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are not capable of forming spores, or iii) any combination of i) and ii). In an embodiment, the first type and the second type are present in the composition in approximately equal concentrations. In an embodiment, the first type and the second type are present in the composition in not substantially equal concentrations. In an embodiment, the first type is present in the composition in at least about 150% the concentration of the second type, or wherein the second type is present in the composition in at least about 150% the concentration of the first type. In an embodiment, the composition consists essentially of between two and about ten types of isolated bacteria, wherein at least two types of isolated bacteria are independently capable of spore formation. In an embodiment, the composition consists essentially of between two and about ten types of isolated bacteria, wherein at least two types of isolated bacteria are not capable of spore formation. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium are selected from Table 1. In an embodiment, the first type of

isolated bacterium and the second type of isolated bacterium comprise an operational taxonomic unit (OTU) distinction. In an embodiment, the OTU distinction comprises 16S rRNA sequence similarity below about 95% identity. In an embodiment, the first type of isolated bacterium and the second type of isolated bacterium independently comprise bacteria that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3. In an embodiment, a combination of the first type and the second type are cytotoxic or cytostatic to the pathogenic bacterium. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least equal to the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type. In an embodiment, the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE). In an embodiment, the first type and the second type synergistically interact to be cytotoxic to the pathogenic bacterium. In an embodiment, the first type and the second type synergistically interact to be cytostatic to the pathogenic bacterium.

[018] Also provided are methods of functionally populating the gastrointestinal tract of a human subject, comprising administering to the subject an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein i) the first type and the second type are independently capable of forming a spore; ii) only one of the first type and the second type are capable of forming a spore or iii) neither the first type nor the second type are capable of forming a spore, wherein the first type and the second type are not identical,

under conditions such that the first type and the second type functionally populate the gastrointestinal tract of the human subject. In an embodiment, the bacterial composition is orally administered, rectally administered, or the combination of orally and rectally administered. In an embodiment, the bacterial composition is topically or nasally administered or inhaled. In an embodiment, the first type of isolated bacteria and the second type of isolated bacteria are selected from Table 1. In an embodiment, the bacterial composition consists essentially of spores, wherein the spores comprise spores of the first type of isolated bacteria and spores of the second type of isolated bacteria. In an embodiment, the first type of isolated bacteria and the second type of isolated bacteria independently comprise bacterial spores that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3. In an embodiment, the functional populating of the gastrointestinal tract comprises preventing a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises treating a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing the severity of a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing one or more symptoms of a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises preventing colonization of the gastrointestinal tract by a pathogenic bacterium. In an embodiment, the functional populating of the gastrointestinal tract comprises reducing colonization of the gastrointestinal tract and/or growth by a pathogenic bacterium. In an embodiment, wherein the functional populating of the gastrointestinal tract comprises reducing the number of one or more types of pathogenic bacteria in the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises increasing the number of one or more non-pathogenic bacteria in the gastrointestinal tract. In an embodiment, the bacterial composition comprises at least about 3, 5, 7 or 9 types of isolated bacteria capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria and at least 20% of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria and at least 2 of the isolated bacteria are capable of forming spores. In an embodiment, the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria, wherein i) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are capable of

forming spores, ii) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are not capable of forming spores, or iii) any combination of i) and ii). In an embodiment, the first type and the second type are present in the composition in approximately equal concentrations. In an embodiment, the first type and the second type are present in the composition in not substantially equal concentrations. In an embodiment, the first type is present in the composition in at least about 150% the concentration of the second type, or wherein the second type is present in the composition in at least about 150% the concentration of the first type. In an embodiment, the composition consists essentially of between two and about ten types of isolated bacteria, wherein i) at least one type of isolated bacteria is capable of spore formation, ii) at least one type of isolated bacteria is not capable of spore formation, or iii) a combination of i) and ii). In an embodiment, a combination of the first type and the second type are inhibitory to the pathogenic bacterium. In an embodiment, the combination reduces the growth rate of the pathogenic bacterium. In an embodiment, the combination is cytostatic or cytotoxic to the pathogenic bacterium. In an embodiment, the combination is capable of inhibiting growth of the pathogenic bacterial present at a concentration at least equal to the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting growth of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type. In an embodiment, the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE). In an embodiment, the first type and the second type synergistically interact to reduce or inhibit the growth of the pathogenic bacterium. In an embodiment, the first type and the second type synergistically interact to reduce or inhibit the colonization of the pathogenic bacterium.

In an embodiment, the method comprises administering to the human subject a single dose unit comprising at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of viable bacteria. In an embodiment, the dose unit comprises a bacterial population substantially in the form of spores. In an embodiment, the dose unit comprises a pharmaceutically acceptable excipient and/or an enteric coating. In an embodiment, the unit dose is formulated for oral administration, rectal administration, or the combination of oral and rectal administration. In an embodiment, the unit dose is formulated for topical or nasal administration or for inhalation.

[019] In another aspect, provided are methods of reducing the number of pathogenic bacteria present in the gastrointestinal tract of a human subject, comprising administering to the subject an effective amount of a pharmaceutical formulation comprising an effective amount of the composition of any one of claims 1, 21, 22 or 31, and further comprising an effective amount of an anti-microbial agent, under conditions such that the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about one month of administration of the pharmaceutical formulation. In an embodiment, the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about two weeks of administration of the pharmaceutical formulation. In an embodiment, the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about one week of administration of the pharmaceutical formulation. In an embodiment, the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about three days of administration of the pharmaceutical formulation. In an embodiment, the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about one day of administration of the pharmaceutical formulation. In an embodiment, the anti-microbial agent comprises anti-bacterial agent. In an embodiment, the anti-microbial agent comprises anti-fungal agent. In an embodiment, the anti-microbial agent comprises anti-viral agent. In an embodiment, the anti-microbial agent comprises anti-parasitic agent.

[020] In another aspect, provided are methods of preparing a comestible product, comprising combining with a comestible carrier a first purified population comprising at least a first type of isolated bacterium and a second purified population comprising at least a second type of isolated bacterium, wherein: i) the first type and the

second type are independently capable of forming a spore; ii) only one of the first type and the second type are capable of forming a spore or iii) neither the first type nor the second type are capable of forming a spore, wherein the first type and the second type of bacteria are not identical, wherein the comestible product is substantially free of non-comestible materials. In an embodiment, at least one of the first purified population and the second purified population consist essentially of viable spores. In an embodiment, the first purified population and the second purified population consist essentially of viable spores. In an embodiment, the comestible product is substantially free of viable vegetal bacterial cells. In an embodiment, the viable spores, when the comestible product is consumed by a human subject in need thereof, are capable of functionally populating the gastrointestinal tract of the human subject. In an embodiment, the comestible product comprises a food or food additive. In an embodiment, the comestible product comprises a beverage or beverage additive. In an embodiment, the comestible product comprises a medical food. In an embodiment, the comestible product comprises at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of viable spores. In an embodiment, spores are of a bacterium selected from Table 1. In an embodiment, the first purified population and the second purified population independently comprise bacterial spores that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.

[021] Also provided are methods of reducing the abundance of a pathogen in the gastrointestinal tract of a patient comprising administering the composition of claim 1 in a therapeutically effective amount and allowing the bacterial composition to compete with the pathogen in the gastrointestinal tract of a patient.

[022] Further provided are methods of treating diarrhea comprising administering the composition of claim 1 in a therapeutically effective amount and allowing the bacterial composition to reduce the diarrheal effect of a pathogen in the gastrointestinal tract of a patient. In an embodiment, the pathogen is *Aeromonas hydrophila*, *Campylobacter fetus*, *Plesiomonas shigelloides*, *Bacillus cereus*, *Campylobacter jejuni*, *Clostridium botulinum*, *Clostridium difficile*, *Clostridium perfringens*, enteroaggregative *Escherichia coli*, enterohemorrhagic *Escherichia coli*, enteroinvasive *Escherichia coli*, enterotoxigenic *Escherichia coli* (LT or ST), *Escherichia coli* 0157:H7, *Helicobacter pylori*, *Listeria monocytogenes*, *Plesiomonas shigelloides*, *Salmonella* spp., *Salmonella typhi*, *Shigella* spp., *Staphylococcus* spp.,

Staphylococcus aureus, *Vibrio* spp., *Vibrio cholerae*, *Vibrio parahaemolyticus*, *Vibrio vulnificus*, *Yersinia enterocolitica*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), and vancomycin-resistant Enterococci (VRE). In an embodiment, the pathogen is *Clostridium difficile*, *Salmonella* spp., pathogenic *Escherichia coli*, or vancomycin-resistant *Enterococcus* spp. In an embodiment, the pathogen is *Clostridium difficile*. In an embodiment, the composition is administered orally.

[023] Also provided are therapeutic compositions comprising a first purified bacterial population capable forming spores consisting of *Collinsella aerofaciens* and a second purified bacterial population consisting of a species selected from Table 1 or Table 4, wherein at least one of the first type and the second type are cytotoxic or cytostatic to a pathogenic bacterium. In an embodiment, a synergistic combination of the first bacterial spore population and the second bacterial spore population are cytotoxic or cytostatic to the pathogenic bacterium. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least equal to the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type. In an embodiment, the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type. In an embodiment, the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Enterococcus*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Brucella*, *Borrelia*, and *Bordetella*. In an embodiment, the pathogenic bacterium is *Clostridium difficile*. In an embodiment, the first bacterial spore population and the second bacterial spore population synergistically interact to be cytotoxic to the pathogenic bacterium. In an embodiment, the first bacterial spore population and the second bacterial spore population synergistically interact to be cytostatic to the pathogenic bacterium. In an embodiment, the bacterial composition comprises at least about 3 types of isolated bacteria capable of forming spores. In an embodiment, the bacterial composition comprises at least about 5 types of isolated bacteria capable of

forming spores. In an embodiment, the first bacterial spore population and the second bacterial spore population are present in the composition in approximately equal concentrations. In an embodiment, the composition consists essentially of between two and about ten bacterial spore populations of isolated bacteria.

[024] In another aspect, provided are therapeutic compositions comprising a first purified bacterial spore population consisting of bacteria comprising 16S rRNA sequence at least about 97% identical to a 16S rRNA sequence present in a reference *Collinsella aerofaciens* OTU, and a second purified bacterial spore population consisting of bacteria comprising 16S rRNA sequence at least about 97% identical to a 16S rRNA sequence present in a reference bacterium listed in Table 1 or Table 4, wherein at least one of the first type and the second type are cytotoxic or cytostatic to a pathogenic bacterium. In an embodiment, a synergistic combination of the first type and the second type are cytotoxic or cytostatic to the pathogenic bacterium. In an embodiment, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least equal to the concentration of the combination of the first type and the second type. In an embodiment, the first type and the second type synergistically interact to be cytotoxic or cytostatic to the pathogenic bacterium. In an embodiment, the first purified bacterial spore population and the second purified bacterial spore population are capable of functionally populating the gastrointestinal tract of a human subject to whom the composition is administered. In an embodiment, the functional populating of the gastrointestinal tract comprises preventing, treating, reducing the severity of or reducing a symptom of a dysbiosis of the gastrointestinal tract. In an embodiment, the functional populating of the gastrointestinal tract comprises i) reducing the number of one or more types of pathogenic bacteria in the gastrointestinal tract; or ii) increasing the number of one or more non-pathogenic bacteria in the gastrointestinal tract. In an embodiment, the composition further comprises an effective amount of an anti-bacterial agent, an anti-fungal agent, an anti-viral agent or an anti-parastic agent.

[025] Also provided are methods of treating or preventing a recurrence of a *Clostridium difficile* infection, comprising administering to a human subject in need thereof an effective amount of the therapeutic composition of claim 14 under conditions such that the first purified bacterial spore population and the second purified bacterial spore population exert a cytotoxic or cytostatic effect on a pathogenic bacterium present in the gastrointestinal tract of the human subject, such that the number of *Clostridium*

difficile bacteria present in the gastrointestinal tract is not detectably increased or is detectably decreased over a period of time. In an embodiment, the number of *Clostridium difficile* bacteria present in or excreted from the gastrointestinal tract of the human subject is detectably reduced within one month of administration of the bacterial composition. In an embodiment, the first purified bacterial spore population and the second purified bacterial spore population synergistically interact to be cytotoxic and/or cytostatic to the *Clostridium difficile* bacteria. In an embodiment, the therapeutic composition is orally administered. In an embodiment, the therapeutic composition comprises a medical food.

[026] In another aspect, provided are kits comprising in one or more containers: a first purified population of a first type of bacteria capable of forming spores; and a second purified population of a second type of bacteria capable of forming spores, wherein the first type and the second type are not identical, and wherein the first type and the second type, when co-localized in a target region of a gastrointestinal tract of a human subject in need thereof, are capable of functionally populating the gastrointestinal tract. In an embodiment, the first purified population and the second purified population are present in a single container. In an embodiment, the kit is formulated for use as a nutritional supplement and optionally comprising a prebiotic material.

[027] Additional objects and advantages will be set forth in part in the description which follows, and in part will be obvious from the description, or may be learned by practice of the embodiments. The objects and advantages will be realized and attained by means of the elements and combinations particularly pointed out in the appended claims.

[028] It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only and are not restrictive of the claims.

[029] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate several embodiments and together with the description, serve to further explain the embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

[030] Figure 1A provides a schematic of 16S rRNA gene and denotes the coordinates of hypervariable regions 1-9 (V1-V9). Coordinates of V1-V9 are 69-99, 137-242, 433-497, 576-682, 822-879, 986-1043, 1117-1173, 1243-1294, and 1435-1465

respectively, based on numbering using *E. coli* system of nomenclature defined by Brosius et al., Complete nucleotide sequence of a 16S ribosomal RNA gene (16S rRNA) from *Escherichia coli*, PNAS 75(10):4801-4805 (1978). Figure 1B highlights in bold the nucleotide sequences for each hypervariable region in the exemplary reference *E. coli* 16S sequence described by Brosius et al.

BRIEF DESCRIPTION OF TABLES

[031] Table 1 provides bacterial species and Operational Taxonomic Units (OTUs) of the bacterial compositions of the present invention, including taxonomic status and the ability of the OTU to form a viable spore as provided herein.

[032] Table 2 provides representative combinations of the bacterial compositions of the present invention.

[033] Table 3 provides 16S rRNA sequences of the bacterial species and Operational Taxonomic Units (OTUs) of the bacterial compositions of the present invention. Table 3 is provided in the CRF version of the Sequence Listing as SEQ ID NOS 1-1,864.

[034] Table 4 provides taxonomic status, exemplary phylogenetic surrogacy and 16S rRNA sequences of exemplary bacterial compositions of the present invention. Table 4 is provided in the CRF version of the Sequence Listing as SEQ ID NOS 1,865-1,915.

[035] Table 5 demonstrates the efficacy of exemplary bacterial compositions of the present invention in inhibiting a pathogenic bacterium.

[036] Table 6 demonstrates the efficacy of exemplary bacterial compositions of the present invention in inhibiting a pathogenic bacterium.

[037] Table 7 provides representative bacterial pathogens.

[038] Table 8 provides representative human diseases, disorders and conditions for which the provided bacterial compositions are useful.

[039] Table 9 provides representative human diseases, disorders and conditions for which the provided bacterial compositions are useful.

DEFINITIONS

[040] "Microbiota" refers to the communities of microbes that live in or on the patient's body, both sustainably and transiently, including eukaryotes, archaea, bacteria, and viruses (including bacterial viruses (i.e., phage)).

[041] “Dysbiosis” refers to a state of the microbiota or microbiome of the gut or other body area, including mucosal or skin surfaces in which the normal diversity and/or function of the ecological network is disrupted. Any disruption from the preferred (e.g., ideal) state of the microbiota can be considered a dysbiosis, even if such dysbiosis does not result in a detectable decrease in health. This state of dysbiosis may be unhealthy, it may be unhealthy under only certain conditions, or it may prevent a subject from becoming healthier. Dysbiosis may be due to a decrease in diversity, the overgrowth of one or more pathogens or pathobionts, symbiotic organisms able to cause disease only when certain genetic and/or environmental conditions are present in a patient, or the shift to an ecological network that no longer provides a beneficial function to the host and therefore no longer promotes health.

[042] A “spore” or a population of “spores” includes bacteria (or other single-celled organisms) that are generally viable, more resistant to environmental influences such as heat and bacteriocidal agents than vegetative forms of the same bacteria, and typically capable of germination and out-growth. “Spore-formers” or bacteria “capable of forming spores” are those bacteria containing the genes and other necessary abilities to produce spores under suitable environmental conditions.

[043] The terms “pathogen”, “pathobiont” and “pathogenic” in reference to a bacterium or any other organism or entity includes any such organism or entity that is capable of causing or affecting a disease, disorder or condition of a host organism containing the organism or entity.

[044] The term “isolated” encompasses a bacterium or other entity or substance that has been (1) separated from at least some of the components with which it was associated when initially produced (whether in nature or in an experimental setting), and/or (2) produced, prepared, purified, and/or manufactured by the hand of man. Isolated bacteria may be separated from at least about 10%, about 20%, about 30%, about 40%, about 50%, about 60%, about 70%, about 80%, about 90%, or more of the other components with which they were initially associated. In some embodiments, isolated bacteria are more than about 80%, about 85%, about 90%, about 91%, about 92%, about 93%, about 94%, about 95%, about 96%, about 97%, about 98%, about 99%, or more than about 99% pure. As used herein, a substance is “pure” if it is substantially free of other components. The terms “purify,” “purifying” and “purified” refer to a bacterium or other material that has been separated from at least some of the components with which it was associated either when initially produced or generated

(e.g., whether in nature or in an experimental setting), or during any time after its initial production. A bacterium or a bacterial population may be considered purified if it is isolated at or after production, such as from a material or environment containing the bacterium or bacterial population, and a purified bacterium or bacterial population may contain other materials up to about 10%, about 20%, about 30%, about 40%, about 50%, about 60%, about 70%, about 80%, about 90%, or above about 90% and still be considered "isolated." In some embodiments, purified bacteria and bacterial populations are more than about 80%, about 85%, about 90%, about 91%, about 92%, about 93%, about 94%, about 95%, about 96%, about 97%, about 98%, about 99%, or more than about 99% pure. In the instance of bacterial compositions provided herein, the one or more bacterial types present in the composition can be independently purified from one or more other bacteria produced and/or present in the material or environment containing the bacterial type. Bacterial compositions and the bacterial components thereof are generally purified from residual habitat products.

[045] "Inhibition" of a pathogen encompasses the inhibition of any desired function or activity of the bacterial compositions of the present invention. Demonstrations of pathogen inhibition, such as decrease in the growth of a pathogenic bacterium or reduction in the level of colonization of a pathogenic bacterium are provided herein and otherwise recognized by one of ordinary skill in the art. Inhibition of a pathogenic bacterium's "growth" may include inhibiting the increase in size of the pathogenic bacterium and/or inhibiting the proliferation (or multiplication) of the pathogenic bacterium. Inhibition of colonization of a pathogenic bacterium may be demonstrated by measuring the amount or burden of a pathogen before and after a treatment. An "inhibition" or the act of "inhibiting" includes the total cessation and partial reduction of one or more activities of a pathogen, such as growth, proliferation, colonization, and function.

[046] The "colonization" of a host organism includes the non-transitory residence of a bacterium or other microscopic organism. As used herein, "reducing colonization" of a host subject's gastrointestinal tract (or any other microbiotal niche) by a pathogenic bacterium includes a reduction in the residence time of the pathogen in the gastrointestinal tract as well as a reduction in the number (or concentration) of the pathogen in the gastrointestinal tract or adhered to the luminal surface of the gastrointestinal tract. Measuring reductions of adherent pathogens may be

demonstrated, e.g., by a biopsy sample, or reductions may be measured indirectly, e.g., by measuring the pathogenic burden in the stool of a mammalian host.

[047] A “combination” of two or more bacteria includes the physical co-existence of the two bacteria, either in the same material or product or in physically connected products, as well as the temporal co-administration or co-localization of the two bacteria.

[048] A “cytotoxic” activity or bacterium includes the ability to kill a bacterial cell, such as a pathogenic bacterial cell. A “cytostatic” activity or bacterium includes the ability to inhibit, partially or fully, growth, metabolism, and/or proliferation of a bacterial cell, such as a pathogenic bacterial cell.

[049] To be free of “non-comestible products” means that a bacterial composition or other material provided herein does not have a substantial amount of a non-comestible product, e.g., a product or material that is inedible, harmful or otherwise undesired in a product suitable for administration, e.g., oral administration, to a human subject. Non-comestible products are often found in preparations of bacteria from the prior art.

[050] “Microbiome” refers to the genetic content of the communities of microbes that live in and on the human body, both sustainably and transiently, including eukaryotes, archaea, bacteria, and viruses (including bacterial viruses (i.e., phage)), wherein “genetic content” includes genomic DNA, RNA such as micro RNA and ribosomal RNA, the epigenome, plasmids, and all other types of genetic information.

[051] “Residual habitat products” refers to material derived from the habitat for microbiota within or on a human or animal. For example, microbiota live in feces in the gastrointestinal tract, on the skin itself, in saliva, mucus of the respiratory tract, or secretions of the genitourinary tract (i.e., biological matter associated with the microbial community). Substantially free of residual habitat products means that the bacterial composition no longer contains the biological matter associated with the microbial environment on or in the human or animal subject and is 100% free, 99% free, 98% free, 97% free, 96% free, or 95% free of any contaminating biological matter associated with the microbial community. Residual habitat products can include abiotic materials (including undigested food) or it can include unwanted microorganisms. Substantially free of residual habitat products may also mean that the bacterial composition contains no detectable cells from a human or animal and that only microbial cells are detectable. In one embodiment, substantially free of residual habitat products may also mean that the bacterial composition contains no detectable viral (including bacterial viruses (i.e.,

phage)), fungal, mycoplasmal contaminants. In another embodiment, it means that fewer than $1 \times 10^{-2}\%$, $1 \times 10^{-3}\%$, $1 \times 10^{-4}\%$, $1 \times 10^{-5}\%$, $1 \times 10^{-6}\%$, $1 \times 10^{-7}\%$, $1 \times 10^{-8}\%$ of the viable cells in the bacterial composition are human or animal, as compared to microbial cells. There are multiple ways to accomplish this degree of purity, none of which are limiting. Thus, contamination may be reduced by isolating desired constituents through multiple steps of streaking to single colonies on solid media until replicate (such as, but not limited to, two) streaks from serial single colonies have shown only a single colony morphology. Alternatively, reduction of contamination can be accomplished by multiple rounds of serial dilutions to single desired cells (e.g., a dilution of 10^{-8} or 10^{-9}), such as through multiple 10-fold serial dilutions. This can further be confirmed by showing that multiple isolated colonies have similar cell shapes and Gram staining behavior. Other methods for confirming adequate purity include genetic analysis (e.g. PCR, DNA sequencing), serology and antigen analysis, enzymatic and metabolic analysis, and methods using instrumentation such as flow cytometry with reagents that distinguish desired constituents from contaminants.

[052] “Phylogenetic tree” refers to a graphical representation of the evolutionary relationships of one genetic sequence to another that is generated using a defined set of phylogenetic reconstruction algorithms (e.g. parsimony, maximum likelihood, or Bayesian). Nodes in the tree represent distinct ancestral sequences and the confidence of any node is provided by a bootstrap or Bayesian posterior probability, which measures branch uncertainty.

[053] “Operational taxonomic unit (OTU, plural OTUs)” refers to a terminal leaf in a phylogenetic tree and is defined by a specific genetic sequence and all sequences that share sequence identity to this sequence at the level of species. A “type” or a plurality of “types” of bacteria includes an OTU or a plurality of different OTUs, and also encompasses a strain, species, genus, family or order of bacteria. The specific genetic sequence may be the 16S sequence or a portion of the 16S sequence or it may be a functionally conserved housekeeping gene found broadly across the eubacterial kingdom. OTUs share at least 95%, 96%, 97%, 98%, or 99% sequence identity. OTUs are frequently defined by comparing sequences between organisms. Sequences with less than 95% sequence identity are not considered to form part of the same OTU.

[054] “Clade” refers to the set of OTUs or members of a phylogenetic tree downstream of a statistically valid node in a phylogenetic tree. The clade comprises a

set of terminal leaves in the phylogenetic tree that is a distinct monophyletic evolutionary unit.

[055] In microbiology, “16S sequencing” or “16S rRNA” or “16S-rRNA” or “16S” refers to sequence derived by characterizing the nucleotides that comprise the 16S ribosomal RNA gene(s). The bacterial 16S rDNA is approximately 1500 nucleotides in length and is used in reconstructing the evolutionary relationships and sequence similarity of one bacterial isolate to another using phylogenetic approaches. 16S sequences are used for phylogenetic reconstruction as they are in general highly conserved, but contain specific hypervariable regions that harbor sufficient nucleotide diversity to differentiate genera and species of most bacteria, as well as fungi.

[056] The “V1-V9 regions” of the 16S rRNA refers to the first through ninth hypervariable regions of the 16S rRNA gene that are used for genetic typing of bacterial samples. These regions in bacteria are defined by nucleotides 69-99, 137-242, 433-497, 576-682, 822-879, 986-1043, 1117-1173, 1243-1294 and 1435-1465 respectively using numbering based on the *E. coli* system of nomenclature. Brosius et al., Complete nucleotide sequence of a 16S ribosomal RNA gene from *Escherichia coli*, PNAS 75(10):4801-4805 (1978). In some embodiments, at least one of the V1, V2, V3, V4, V5, V6, V7, V8, and V9 regions are used to characterize an OTU. In one embodiment, the V1, V2, and V3 regions are used to characterize an OTU. In another embodiment, the V3, V4, and V5 regions are used to characterize an OTU. In another embodiment, the V4 region is used to characterize an OTU. A person of ordinary skill in the art can identify the specific hypervariable regions of a candidate 16S rRNA (in Table 3) by comparing the candidate sequence in question to the reference sequence and identifying the hypervariable regions based on similarity to the reference hypervariable regions.

[057] The terms “subject” or “patient” refers to any animal subject including humans, laboratory animals (e.g., primates, rats, mice), livestock (e.g., cows, sheep, goats, pigs, turkeys, chickens), and household pets (e.g., dogs, cats, rodents, etc.). The subject or patient may be healthy, or may be suffering from an infection due to a gastrointestinal pathogen or may be at risk of developing or transmitting to others an infection due to a gastrointestinal pathogen.

[058] The term “pathobiont” refer to specific bacterial species found in healthy hosts that may trigger immune-mediated pathology and/or disease in response to certain genetic or environmental factors. Chow et al., (2011) *Curr Op*

Immunol. Pathobionts of the intestinal microbiota and inflammatory disease. **23**: 473-80. Thus, a pathobiont is a pathogen that is mechanistically distinct from an acquired infectious organism. Thus, the term "pathogen" includes both acquired infectious organisms and pathobionts.

DETAILED DESCRIPTION

Bacterial Compositions

[059] Provided are bacteria and combinations of bacteria of the human gut microbiota with the capacity to meaningfully provide functions of a healthy microbiota or catalyze an augmentation to the resident microbiome when administered to mammalian hosts. In particular, provided are synergistic combinations that treat, prevent, delay or reduce the symptoms of diseases, disorders and conditions associated with a dysbiosis. Representative diseases, disorders and conditions potentially associated with a dysbiosis, which are suitable for treatment with the compositions and methods as described herein, are provided in Tables 8 and 9. Without being limited to a specific mechanism, it is thought that such compositions inhibit the growth, proliferation, and/or colonization of one or a plurality of pathogenic bacteria in the dysbiotic microbial niche, so that a healthy, diverse and protective microbiota colonizes and populates the intestinal lumen to establish or reestablish ecological control over pathogens or potential pathogens (e.g., some bacteria are pathogenic bacteria only when present in a dysbiotic environment). Inhibition of pathogens includes those pathogens such as *C. difficile*, *Salmonella* spp., enteropathogenic *E. coli*, multi-drug resistant bacteria such as *Klebsiella*, and *E. coli*, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE).

[060] The bacterial compositions provided herein are produced and the efficacy thereof in inhibiting pathogenic bacteria is demonstrated as provided in further detail herein.

[061] In particular, in order to characterize those antagonistic relationships between gut commensals that are relevant to the dynamics of the mammalian gut habitat, provided is an in vitro microplate-based screening system that demonstrates the efficacy of those bacterial compositions, including the ability to inhibit (or antagonize) the growth of a bacterial pathogen or pathobiont, typically a gastrointestinal microorganism.

These methods provide novel combinations of gut microbiota species and OTUs that are able to restore or enhance ecological control over important gut pathogens or pathobionts *in vivo*.

[062] Bacterial compositions may comprise two types of bacteria (termed “binary combinations” or “binary pairs”) or greater than two types of bacteria. Bacterial compositions that comprise three types of bacteria are termed “ternary combinations”. For instance, a bacterial composition may comprise at least 2, at least 3, at least 4, at least 5, at least 6, at least 7, at least 8, at least 9, at least 10, at least 11, at least 12, at least 13, at least 14, at least 15, at least 16, at least 17, at least 18, at least 19, at least 20, or at least 21, 22, 23, 24, 25, 26, 27, 28, 29 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, or at least 40, at least 50 or greater than 50 types of bacteria, as defined by species or operational taxonomic unit (OTU), or otherwise as provided herein. In one embodiment, the composition comprises at least two types of bacteria chosen from Table 1.

[063] In another embodiment, the number of types of bacteria present in a bacterial composition is at or below a known value. For example, in such embodiments the bacterial composition comprises 50 or fewer types of bacteria, such as 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, or 10 or fewer, or 9 or fewer types of bacteria, 8 or fewer types of bacteria, 7 or fewer types of bacteria, 6 or fewer types of bacteria, 5 or fewer types of bacteria, 4 or fewer types of bacteria, or 3 or fewer types of bacteria. In another embodiment, a bacterial composition comprises from 2 to no more than 40, from 2 to no more than 30, from 2 to no more than 20, from 2 to no more than 15, from 2 to no more than 10, or from 2 to no more than 5 types of bacteria.

[064] In some embodiments, bacterial compositions are provided with the ability to exclude pathogenic bacteria. Exemplary bacterial compositions are demonstrated to reduce the growth rate of one pathogen, *C. difficile*, as provided in the Examples, wherein the ability of the bacterial compositions is demonstrated by assessing the antagonism activity of a combination of OTUs or strains towards a given pathogen using *in vitro* assays.

[065] In some embodiments, bacterial compositions with the capacity to durably exclude *C. difficile*, are developed using a methodology for estimating an Ecological Control Factor (ECF) for constituents within the human microbiota. The ECF is determined by assessing the antagonistic activity of a given commensal strain or combination of strains towards a given pathogen using an *in vitro* assay, resulting in

observed levels of ecological control at various concentrations of the added commensal strains. The ECF for a commensal strain or combination of strains is somewhat analogous to the longstanding minimal inhibitory concentration (MIC) assessment that is employed in the assessment of antibiotics. The ECF allows for the assessment and ranking of relative potencies of commensal strains and combinations of strains for their ability to antagonize gastrointestinal pathogens. The ECF of a commensal strain or combination of strains may be calculated by assessing the concentration of that composition that is able to mediate a given percentage of inhibition (e.g., at least 10%, 20%, 50%, 70%, 75%, 80%, 85%, 90%, 95%, or 100%) of a target pathogen in the *in vitro* assay. Provided herein are combinations of strains or OTUs within the human microbiota that are able to significantly reduce the rate of gastrointestinal pathogen replication within the *in vitro* assay. These compositions are capable of providing a safe and effective means by which to affect the growth, replication, and disease severity of such bacterial pathogens.

[066] Bacterial compositions may be prepared comprising at least two types of isolated bacteria, wherein a first type and a second type are independently chosen from the species or OTUs listed in Table 1 and Table 3. Certain embodiments of bacterial compositions with at least two types of isolated bacteria containing binary pairs are reflected in Table 2. Additionally, a bacterial composition may be prepared comprising at least two types of isolated bacteria, wherein a first OTU and a second OTU are independently characterized by, i.e., at least 95%, 96%, 97%, 98%, 99% or including 100% sequence identity to, sequences listed in Table 3. Generally, the first bacteria and the second bacteria are not the same OTU. The sequences provided in Table 3 are full 16S sequences. Therefore, in one embodiment, the first and/or second OTUs may be characterized by the full 16S sequences listed in Table 3. In another embodiment, the first and/or second OTUs may be characterized by one or more of the variable regions of the 16S sequence (V1-V9). These regions in bacteria are defined by nucleotides 69-99, 137-242, 433-497, 576-682, 822-879, 986-1043, 1117-1173, 1243-1294 and 1435-1465 respectively using numbering based on the *E. coli* system of nomenclature. (See, e.g., Brosius et al., Complete nucleotide sequence of a 16S ribosomal RNA gene from *Escherichia coli*, PNAS 75(10):4801-4805 (1978)). In some embodiments, at least one of the V1, V2, V3, V4, V5, V6, V7, V8, and V9 regions are used to characterize an OTU. In one embodiment, the V1, V2, and V3 regions are used to characterize an OTU. In

another embodiment, the V3, V4, and V5 regions are used to characterize an OTU. In another embodiment, the V4 region is used to characterize an OTU.

[067] Methods for Determining 16S Sequence. OTUs may be defined either by full 16S sequencing of the rRNA gene, by sequencing of a specific hypervariable region of this gene (i.e. V1, V2, V3, V4, V5, V6, V7, V8, or V9), or by sequencing of any combination of hypervariable regions from this gene (e.g. V1-3 or V3-5). The bacterial 16S rDNA is approximately 1500 nucleotides in length and is used in reconstructing the evolutionary relationships and sequence similarity of one bacterial isolate to another using phylogenetic approaches. 16S sequences are used for phylogenetic reconstruction as they are in general highly conserved, but contain specific hypervariable regions that harbor sufficient nucleotide diversity to differentiate genera and species of most microbes. Using well known techniques, in order to determine the full 16S sequence or the sequence of any hypervariable region of the 16S sequence, genomic DNA is extracted from a bacterial sample, the 16S rDNA (full region or specific hypervariable regions) amplified using polymerase chain reaction (PCR), the PCR products cleaned, and nucleotide sequences delineated to determine the genetic composition of 16S gene or subdomain of the gene. If full 16S sequencing is performed, the sequencing method used may be, but is not limited to, Sanger sequencing. If one or more hypervariable regions are used, such as the V4 region, the sequencing may be, but is not limited to being, performed using the Sanger method or using a next-generation sequencing method, such as an Illumina (sequencing by synthesis) method using barcoded primers allowing for multiplex reactions.

[068] Bacterial Compositions exclusive of certain bacterial species or strains. In one embodiment, the bacterial composition does not comprise at least one of *Enterococcus faecalis* (previously known as *Streptococcus faecalis*), *Clostridium innocuum*, *Clostridium ramosum*, *Bacteroides ovatus*, *Bacteroides vulgatus*, *Bacteroides thetaiotaomicron*, *Escherichia coli* (1109 and 1108-1), *Clostridium bifermentans*, and *Blautia producta* (previously known as *Peptostreptococcus productus*).

[069] In another embodiment, the bacterial composition does not comprise at least one of *Acidaminococcus intestinalis*, *Bacteroides ovatus*, two species of *Bifidobacterium adolescentis*, two species of *Bifidobacterium longum*, *Collinsella aerofaciens*, two species of *Dorea longicatena*, *Escherichia coli*, *Eubacterium eligens*, *Eubacterium limosum*, four species of *Eubacterium rectale*, *Eubacterium ventriosum*, *Faecalibacterium prausnitzii*, *Lactobacillus casei*, *Lactobacillus paracasei*,

Paracateroides distasonis, *Raoultella* sp., one species of *Roseburia* (chosen from *Roseburia faecalis* or *Roseburia faecis*), *Roseburia intestinalis*, two species of *Ruminococcus torques*, and *Streptococcus mitis*.

[070] In another embodiment, the bacterial composition does not comprise at least one of *Barnesiella intestinihominis*; *Lactobacillus reuteri*; a species characterized as one of *Enterococcus hirae*, *Enterococcus faecium*, or *Enterococcus durans*; a species characterized as one of *Anaerostipes caccae* or *Clostridium indolis*; a species characterized as one of *Staphylococcus warneri* or *Staphylococcus pasteurii*; and *Adlercreutzia equolifaciens*.

[071] In another embodiment, the bacterial composition does not comprise at least one of *Clostridium absonum*, *Clostridium argentinense*, *Clostridium baratii*, *Clostridium bifermentans*, *Clostridium botulinum*, *Clostridium butyricum*, *Clostridium cadaveris*, *Clostridium camis*, *Clostridium celatum*, *Clostridium chauvoei*, *Clostridium clostridioforme*, *Clostridium cochlearium*, *Clostridium difficile*, *Clostridium fallax*, *Clostridium felsineum*, *Clostridium ghonii*, *Clostridium glycolicum*, *Clostridium haemolyticum*, *Clostridium hastiforme*, *Clostridium histolyticum*, *Clostridium indolis*, *Clostridium innocuum*, *Clostridium irregulare*, *Clostridium limosum*, *Clostridium malenominatum*, *Clostridium novyi*, *Clostridium oroticum*, *Clostridium paraputrificum*, *Clostridium perfringens*, *Clostridium piliforme*, *Clostridium putrefaciens*, *Clostridium putrificum*, *Clostridium ramosum*, *Clostridium sardiniense*, *Clostridium sartagoforme*, *Clostridium scindens*, *Clostridium septicum*, *Clostridium sordellii*, *Clostridium sphenoides*, *Clostridium spiroforme*, *Clostridium sporogenes*, *Clostridium subterminale*, *Clostridium symbiosum*, *Clostridium tertium*, *Clostridium tetani*, *Clostridium welchii*, and *Clostridium villosum*.

[072] In another embodiment, the bacterial composition does not comprise at least one of *Clostridium innocuum*, *Clostridium bifermentans*, *Clostridium butyricum*, *Bacteroides fragilis*, *Bacteroides thetaiotaomicron*, *Bacteroides uniformis*, three strains of *Escherichia coli*, and *Lactobacillus* sp..

[073] In another embodiment, the bacterial composition does not comprise at least one of *Clostridium bifermentans*, *Clostridium innocuum*, *Clostridium butyricum*, three strains of *Escherichia coli*, three strains of *Bacteroides*, and *Blautia producta* (previously known as *Peptostreptococcus productus*).

[074] In another embodiment, the bacterial composition does not comprise at least one of *Bacteroides* sp., *Escherichia coli*, and non pathogenic *Clostridia*, including *Clostridium innocuum*, *Clostridium bifermentans* and *Clostridium ramosum*.

[075] In another embodiment, the bacterial composition does not comprise at least one of more than one *Bacteroides* species, *Escherichia coli* and non-pathogenic *Clostridia*, such as *Clostridium butyricum*, *Clostridium bifermentans* and *Clostridium innocuum*.

[076] In another embodiment, the bacterial composition does not comprise at least one of *Bacteroides caccae*, *Bacteroides capillosus*, *Bacteroides coagulans*, *Bacteroides distasonis*, *Bacteroides eggerthii*, *Bacteroides forsythus*, *Bacteroides fragilis*, *Bacteroides fragilis-ryhm*, *Bacteroides gracilis*, *Bacteroides levii*, *Bacteroides macacae*, *Bacteroides merdae*, *Bacteroides ovatus*, *Bacteroides pneumosintes*, *Bacteroides putredinis*, *Bacteroides pyogenes*, *Bacteroides splanchnicus*, *Bacteroides stercoris*, *Bacteroides tectum*, *Bacteroides thetaiotaomicron*, *Bacteroides uniformis*, *Bacteroides ureolyticus*, and *Bacteroides vulgatus*.

[077] In another embodiment, the bacterial composition does not comprise at least one of *Bacteroides*, *Eubacteria*, *Fusobacteria*, *Propionibacteria*, *Lactobacilli*, *anaerobic cocci*, *Ruminococcus*, *Escherichia coli*, *Gemmiger*, *Desulfomonas*, and *Peptostreptococcus*.

[078] In another embodiment, the bacterial composition does not comprise at least one of *Bacteroides fragilis* ss. *Vulgatus*, *Eubacterium aerofaciens*, *Bacteroides fragilis* ss. *Thetaiotaomicron*, *Blautia producta* (previously known as *Peptostreptococcus productus* II), *Bacteroides fragilis* ss. *Distasonis*, *Fusobacterium prausnitzii*, *Coprococcus eutactus*, *Eubacterium aerofaciens* III, *Blautia producta* (previously known as *Peptostreptococcus productus* I), *Ruminococcus bromii*, *Bifidobacterium adolescentis*, *Gemmiger formicilis*, *Bifidobacterium longum*, *Eubacterium siraeum*, *Ruminococcus torques*, *Eubacterium rectale* III-H, *Eubacterium rectale* IV, *Eubacterium eligens*, *Bacteroides eggerthii*, *Clostridium leptum*, *Bacteroides fragilis* ss. A, *Eubacterium biforme*, *Bifidobacterium infantis*, *Eubacterium rectale* III-F, *Coprococcus comes*, *Bacteroides capillosus*, *Ruminococcus albus*, *Eubacterium formicigenerans*, *Eubacterium hallii*, *Eubacterium ventriosum* I, *Fusobacterium russii*, *Ruminococcus obeum*, *Eubacterium rectale* II, *Clostridium ramosum* I, *Lactobacillus leichmanii*, *Ruminococcus cailidus*, *Butyrivibrio crossotus*, *Acidaminococcus fermentans*, *Eubacterium ventriosum*, *Bacteroides fragilis* ss. *fragilis*, *Bacteroides AR*, *Coprococcus*

catus, *Eubacterium hadrum*, *Eubacterium cylindroides*, *Eubacterium ruminantium*, *Eubacterium CH-1*, *Staphylococcus epidermidis*, *Peptostreptococcus BL*, *Eubacterium limosum*, *Bacteroides praeacutus*, *Bacteroides L*, *Fusobacterium mortiferum I*, *Fusobacterium naviforme*, *Clostridium innocuum*, *Clostridium ramosum*, *Propionibacterium acnes*, *Ruminococcus flavefaciens*, *Ruminococcus AT*, *Peptococcus AU-1*, *Eubacterium AG*, -AK, -AL, -AL-1, -AN; *Bacteroides fragilis* ss. *ovatus*, -ss. *d*, -ss. *f*; *Bacteroides L-1*, *L-5*; *Fusobacterium nucleatum*, *Fusobacterium mortiferum*, *Escherichia coli*, *Streptococcus morbillorum*, *Peptococcus magnus*, *Peptococcus G*, *AU-2*; *Streptococcus intermedius*, *Ruminococcus lactaris*, *Ruminococcus CO Gemmiger X*, *Coprococcus BH*, -CC; *Eubacterium tenue*, *Eubacterium ramulus*, *Eubacterium AE*, -AG-H, -AG-M, -AJ, -BN-1; *Bacteroides clostridiiformis* ss. *clostridiiformis*, *Bacteroides coagulans*, *Bacteroides orails*, *Bacteroides ruminicola* ss. *brevis*, -ss. *ruminicola*, *Bacteroides splanchnicus*, *Desulfomonas pigra*, *Bacteroides L-4*, -N-i; *Fusobacterium H*, *Lactobacillus G*, and *Succinivibrio A*.

[079] Inhibition of Bacterial Pathogens. The bacterial compositions offer a protective or therapeutic effect against infection by one or more GI pathogens of interest.

[080] A list of exemplary bacterial pathogens is provided in Table 7.

[081] In some embodiments, the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydothrix*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, extended spectrum beta-lactam resistant *Enterococci* (ESBL), Carbapenem-resistant *Enterobacteriaceae* (CRE), and vancomycin-resistant *Enterococci* (VRE).

[082] In some embodiments, these pathogens include, but are not limited to, *Aeromonas hydrophila*, *Campylobacter fetus*, *Plesiomonas shigelloides*, *Bacillus cereus*, *Campylobacter jejuni*, *Clostridium botulinum*, *Clostridium difficile*, *Clostridium perfringens*, enteroaggregative *Escherichia coli*, enterohemorrhagic *Escherichia coli*, enteroinvasive *Escherichia coli*, enterotoxigenic *Escherichia coli* (such as, but not limited to, LT and/or ST), *Escherichia coli* 0157:H7, *Helicobacter pylori*, *Klebsiella pneumoniae*, *Listeria monocytogenes*, *Plesiomonas shigelloides*, *Salmonella* spp., *Salmonella typhi*,

Salmonella paratyphi, *Shigella* spp., *Staphylococcus* spp., *Staphylococcus aureus*, vancomycin-resistant *enterococcus* spp., *Vibrio* spp., *Vibrio cholerae*, *Vibrio parahaemolyticus*, *Vibrio vulnificus*, and *Yersinia enterocolitica*.

[083] In one embodiment, the pathogen of interest is at least one pathogen chosen from *Clostridium difficile*, *Salmonella* spp., pathogenic *Escherichia coli*, vancomycin-resistant *Enterococcus* spp., and extended spectrum beta-lactam resistant *Enterococci* (ESBL).

[084] *In Vitro Assays Substantiating Protective Effect of Bacterial Compositions.*

[085] In one embodiment, provided is an *In Vitro* Assay utilizing competition between the bacterial compositions or subsets thereof and *C. difficile*. Exemplary embodiments of this Assay are provided herein and in the Examples.

[086] In another embodiment, provided is an *In Vitro* Assay utilizing 10% (wt/vol) Sterile-Filtered Feces. Provided is an *in vitro* assay to test for the protective effect of the bacterial compositions and to screen *in vitro* for combinations of microbes that inhibit the growth of a pathogen. The assay can operate in automated high-throughput or manual modes. Under either system, human or animal feces may be re-suspended in an anaerobic buffer solution, such as pre-reduced PBS or other suitable buffer, the particulate removed by centrifugation, and filter sterilized. This 10% sterile-filtered feces material serves as the base media for the *in vitro* assay. To test a bacterial composition, an investigator may add it to the sterile-filtered feces material for a first incubation period and then may inoculate the incubated microbial solution with the pathogen of interest for a second incubation period. The resulting titer of the pathogen may be quantified by any number of methods such as those described below, and the change in the amount of pathogen is compared to standard controls including the pathogen cultivated in the absence of the bacterial composition. The assay is conducted using at least one control. Feces from a healthy subject may be used as a positive control. As a negative control, antibiotic-treated feces or heat-treated feces may be used. Various bacterial compositions may be tested in this material and the bacterial compositions optionally compared to the positive and/or negative controls. The ability to inhibit the growth of the pathogen may be measured by plating the incubated material on *C. difficile* selective media and counting colonies. After competition between the bacterial composition and *C. difficile*, each well of the *in vitro* assay plate is serially diluted ten-fold six times, and plated on selective media, such as but not limited to cycloserine cefoxitin mannitol agar (CCMA) or cycloserine cefoxitin fructose agar (CCFA), and incubated. Colonies of *C.*

difficile are then counted to calculate the concentration of viable cells in each well at the end of the competition. Colonies of *C. difficile* are confirmed by their characteristic diffuse colony edge morphology as well as fluorescence under UV light.

[087] In another embodiment, the *in vitro* assay utilizes Antibiotic-Treated Feces. In an alternative embodiment, and instead of using 10% sterile-filtered feces, human or animal feces may be resuspended in an anaerobic buffer solution, such as pre-reduced PBS or other suitable buffer. The resuspended feces is treated with an antibiotic, such as clindamycin, or a cocktail of several antibiotics in order to reduce the ability of feces from a healthy subject to inhibit the growth of *C. difficile*; this material is termed the antibiotic-treated matrix. While not being bound by any mechanism, it is believed that beneficial bacteria in healthy subjects protects them from infection by competing out *C. difficile*. Treating feces with antibiotics kills or reduces the population of those beneficial bacteria, allowing *C. difficile* to grow in this assay matrix. Antibiotics in addition to clindamycin that inhibit the normal flora include ceftriaxone and piperacillin-tazobactam and may be substituted for the clindamycin. The antibiotic-treated matrix is centrifuged, the supernatant removed, and the pelleted material resuspended in filter-sterilized, diluted feces in order to remove any residual antibiotic. This washed antibiotic-treated matrix may be used in the *in vitro* assay described above in lieu of the 10% sterile-filtered feces.

[088] Alternatively, the ability to inhibit the growth of the pathogen may be measured by quantitative PCR (qPCR). Standard techniques may be followed to generate a standard curve for the pathogen of interest. Genomic DNA may be extracted from samples using commercially-available kits, such as the Mo Bio Powersoil®-htp 96 Well Soil DNA Isolation Kit (Mo Bio Laboratories, Carlsbad, CA), the Mo Bio Powersoil® DNA Isolation Kit (Mo Bio Laboratories, Carlsbad, CA), or the QIAamp DNA Stool Mini Kit (QIAGEN, Valencia, CA) according to the manufacturer's instructions. The qPCR may be conducted using HotMasterMix (5PRIME, Gaithersburg, MD) and primers specific for the pathogen of interest, and may be conducted on a MicroAmp® Fast Optical 96-well Reaction Plate with Barcode (0.1mL) (Life Technologies, Grand Island, NY) and performed on a BioRad C1000™ Thermal Cycler equipped with a CFX96™ Real-Time System (BioRad, Hercules, CA), with fluorescent readings of the FAM and ROX channels. The C_q value for each well on the FAM channel is determined by the CFX Manager™ software version 2.1. The log₁₀(cfu/ml) of each experimental sample is calculated by inputting a given sample's C_q value into linear regression model

generated from the standard curve comparing the Cq values of the standard curve wells to the known $\log_{10}(\text{cfu/ml})$ of those samples. The skilled artisan may employ alternative qPCR modes.

[089] Also provided are *In Vivo* Assay Establishing Protective Effect of Bacterial Compositions. Provided is an *in vivo* mouse model to test for the protective effect of the bacterial compositions against *C. difficile*. In this model (based on Chen, et al., A mouse model of Clostridium difficile associated disease, Gastroenterology 135(6):1984-1992 (2008)), mice are made susceptible to *C. difficile* by a 7 day treatment (days -12 to -5 of experiment) with 5 to 7 antibiotics (including kanamycin, colistin, gentamycin, metronidazole and vancomycin and optionally including ampicillin and ciprofloxacin) delivered via their drinking water, followed by a single dose with Clindamycin on day -3, then challenged three days later on day 0 with 10^4 spores of *C. difficile* via oral gavage (i.e., oro-gastric lavage). Bacterial compositions may be given either before (prophylactic treatment) or after (therapeutic treatment) *C. difficile* gavage. Further, bacterial compositions may be given after (optional) vancomycin treatment (see below) to assess their ability to prevent recurrence and thus suppress the pathogen *in vivo*. The outcomes assessed each day from day -1 to day 6 (or beyond, for prevention of recurrence) are weight, clinical signs, mortality and shedding of *C. difficile* in the feces. Weight loss, clinical signs of disease, and *C. difficile* shedding are typically observed without treatment. Vancomycin provided by oral gavage on days -1 to 4 protects against these outcomes and serves as a positive control. Clinical signs are subjective, and scored each day by the same experienced observer. Animals that lose greater than or equal to 25% of their body weight are euthanized and counted as infection-related mortalities. Feces are gathered from mouse cages (5 mice per cage) each day, and the shedding of *C. difficile* spores is detected in the feces using a selective plating assay as described for the *in vitro* assay above, or via qPCR for the toxin gene as described herein. The effects of test materials including 10% suspension of human feces (as a positive control), bacterial compositions, or PBS (as a negative vehicle control), are determined by introducing the test article in a 0.2 mL volume into the mice via oral gavage on day -1, one day prior to *C. difficile* challenge, on day 1, 2 and 3 as treatment or post-vancomycin treatment on days 5, 6, 7 and 8. Vancomycin, as discussed above, is given on days 1 to 4 as another positive control. Alternative dosing schedules and routes of administration (e.g. rectal) may be employed, including multiple doses of test article, and 10^3 to 10^{10} of a given organism or composition may be delivered.

Methods for Preparing a Bacterial Composition for Administration to a Subject.

[090] Methods for producing bacterial compositions may include three main processing steps, combined with one or more mixing steps. The steps are: organism banking, organism production, and preservation.

[091] For banking, the strains included in the bacterial composition may be (1) isolated directly from a specimen or taken from a banked stock, (2) optionally cultured on a nutrient agar or broth that supports growth to generate viable biomass, and (3) the biomass optionally preserved in multiple aliquots in long-term storage.

[092] In embodiments using a culturing step, the agar or broth may contain nutrients that provide essential elements and specific factors that enable growth. An example would be a medium composed of 20 g/L glucose, 10 g/L yeast extract, 10 g/L soy peptone, 2 g/L citric acid, 1.5 g/L sodium phosphate monobasic, 100 mg/L ferric ammonium citrate, 80 mg/L magnesium sulfate, 10 mg/L hemin chloride, 2 mg/L calcium chloride, 1 mg/L menadione. A variety of microbiological media and variations are well known in the art (e.g. R.M. Atlas, *Handbook of Microbiological Media* (2010) CRC Press). Medium can be added to the culture at the start, may be added during the culture, or may be intermittently/continuously flowed through the culture. The strains in the bacterial composition may be cultivated alone, as a subset of the bacterial composition, or as an entire collection comprising the bacterial composition. As an example, a first strain may be cultivated together with a second strain in a mixed continuous culture, at a dilution rate lower than the maximum growth rate of either cell to prevent the culture from washing out of the cultivation.

[093] The inoculated culture is incubated under favorable conditions for a time sufficient to build biomass. For bacterial compositions for human use this is often at 37°C temperature, pH, and other parameter with values similar to the normal human niche. The environment may be actively controlled, passively controlled (e.g., via buffers), or allowed to drift. For example, for anaerobic bacterial compositions (e.g., gut microbiota), an anoxic/reducing environment may be employed. This can be accomplished by addition of reducing agents such as cysteine to the broth, and/or stripping it of oxygen. As an example, a culture of a bacterial composition may be grown at 37°C, pH 7, in the medium above, pre-reduced with 1 g/L cysteine•HCl.

[094] When the culture has generated sufficient biomass, it may be preserved for banking. The organisms may be placed into a chemical milieu that protects from freezing (adding 'cryoprotectants'), drying ('lyoprotectants'), and/or osmotic shock

('osmoprotectants'), dispensing into multiple (optionally identical) containers to create a uniform bank, and then treating the culture for preservation. Containers are generally impermeable and have closures that assure isolation from the environment.

Cryopreservation treatment is accomplished by freezing a liquid at ultra-low temperatures (e.g., at or below -80°C). Dried preservation removes water from the culture by evaporation (in the case of spray drying or 'cool drying') or by sublimation (e.g., for freeze drying, spray freeze drying). Removal of water improves long-term bacterial composition storage stability at temperatures elevated above cryogenic. If the bacterial composition comprises spore forming species and results in the production of spores, the final composition may be purified by additional means such as density gradient centrifugation preserved using the techniques described above. Bacterial composition banking may be done by culturing and preserving the strains individually, or by mixing the strains together to create a combined bank. As an example of cryopreservation, a bacterial composition culture may be harvested by centrifugation to pellet the cells from the culture medium, the supernate decanted and replaced with fresh culture broth containing 15% glycerol. The culture can then be aliquoted into 1 mL cryotubes, sealed, and placed at -80°C for long-term viability retention. This procedure achieves acceptable viability upon recovery from frozen storage.

[095] Organism production may be conducted using similar culture steps to banking, including medium composition and culture conditions. It may be conducted at larger scales of operation, especially for clinical development or commercial production. At larger scales, there may be several subcultivations of the bacterial composition prior to the final cultivation. At the end of cultivation, the culture is harvested to enable further formulation into a dosage form for administration. This can involve concentration, removal of undesirable medium components, and/or introduction into a chemical milieu that preserves the bacterial composition and renders it acceptable for administration via the chosen route. For example, a bacterial composition may be cultivated to a concentration of 10^{10} CFU/mL, then concentrated 20-fold by tangential flow microfiltration; the spent medium may be exchanged by diafiltering with a preservative medium consisting of 2% gelatin, 100 mM trehalose, and 10 mM sodium phosphate buffer. The suspension can then be freeze-dried to a powder and titrated.

[096] After drying, the powder may be blended to an appropriate potency, and mixed with other cultures and/or a filler such as microcrystalline cellulose for

consistency and ease of handling, and the bacterial composition formulated as provided herein.

[097] Formulations. Provided are formulations for administration to humans and other subjects in need thereof. Generally the bacterial compositions are combined with additional active and/or inactive materials in order to produce a final product, which may be in single dosage unit or in a multi-dose format.

[098] In some embodiments the composition comprises at least one carbohydrate. A “carbohydrate” refers to a sugar or polymer of sugars. The terms “saccharide,” “polysaccharide,” “carbohydrate,” and “oligosaccharide” may be used interchangeably. Most carbohydrates are aldehydes or ketones with many hydroxyl groups, usually one on each carbon atom of the molecule. Carbohydrates generally have the molecular formula $C_nH_{2n}O_n$. A carbohydrate may be a monosaccharide, a disaccharide, trisaccharide, oligosaccharide, or polysaccharide. The most basic carbohydrate is a monosaccharide, such as glucose, sucrose, galactose, mannose, ribose, arabinose, xylose, and fructose. Disaccharides are two joined monosaccharides. Exemplary disaccharides include sucrose, maltose, cellobiose, and lactose. Typically, an oligosaccharide includes between three and six monosaccharide units (e.g., raffinose, stachyose), and polysaccharides include six or more monosaccharide units. Exemplary polysaccharides include starch, glycogen, and cellulose. Carbohydrates may contain modified saccharide units such as 2'-deoxyribose wherein a hydroxyl group is removed, 2'-fluororibose wherein a hydroxyl group is replaced with a fluorine, or N-acetylglucosamine, a nitrogen-containing form of glucose (e.g., 2'-fluororibose, deoxyribose, and hexose). Carbohydrates may exist in many different forms, for example, conformers, cyclic forms, acyclic forms, stereoisomers, tautomers, anomers, and isomers.

[099] In some embodiments the composition comprises at least one lipid. As used herein a “lipid” includes fats, oils, triglycerides, cholesterol, phospholipids, fatty acids in any form including free fatty acids. Fats, oils and fatty acids can be saturated, unsaturated (cis or trans) or partially unsaturated (cis or trans). In some embodiments the lipid comprises at least one fatty acid selected from lauric acid (12:0), myristic acid (14:0), palmitic acid (16:0), palmitoleic acid (16:1), margaric acid (17:0), heptadecenoic acid (17:1), stearic acid (18:0), oleic acid (18:1), linoleic acid (18:2), linolenic acid (18:3), octadecatetraenoic acid (18:4), arachidic acid (20:0), eicosenoic acid (20:1), eicosadienoic acid (20:2), eicosatetraenoic acid (20:4), eicosapentaenoic acid (20:5)

(EPA), docosanoic acid (22:0), docosenoic acid (22:1), docosapentaenoic acid (22:5), docosahexaenoic acid (22:6) (DHA), and tetracosanoic acid (24:0). In some embodiments the composition comprises at least one modified lipid, for example a lipid that has been modified by cooking.

[0100] In some embodiments the composition comprises at least one supplemental mineral or mineral source. Examples of minerals include, without limitation: chloride, sodium, calcium, iron, chromium, copper, iodine, zinc, magnesium, manganese, molybdenum, phosphorus, potassium, and selenium. Suitable forms of any of the foregoing minerals include soluble mineral salts, slightly soluble mineral salts, insoluble mineral salts, chelated minerals, mineral complexes, non-reactive minerals such as carbonyl minerals, and reduced minerals, and combinations thereof.

[0101] In some embodiments the composition comprises at least one supplemental vitamin. The at least one vitamin can be fat-soluble or water soluble vitamins. Suitable vitamins include but are not limited to vitamin C, vitamin A, vitamin E, vitamin B12, vitamin K, riboflavin, niacin, vitamin D, vitamin B6, folic acid, pyridoxine, thiamine, pantothenic acid, and biotin. Suitable forms of any of the foregoing are salts of the vitamin, derivatives of the vitamin, compounds having the same or similar activity of the vitamin, and metabolites of the vitamin.

[0102] In some embodiments the composition comprises an excipient. Non-limiting examples of suitable excipients include a buffering agent, a preservative, a stabilizer, a binder, a compaction agent, a lubricant, a dispersion enhancer, a disintegration agent, a flavoring agent, a sweetener, and a coloring agent.

[0103] In some embodiments the excipient is a buffering agent. Non-limiting examples of suitable buffering agents include sodium citrate, magnesium carbonate, magnesium bicarbonate, calcium carbonate, and calcium bicarbonate.

[0104] In some embodiments the excipient comprises a preservative. Non-limiting examples of suitable preservatives include antioxidants, such as alpha-tocopherol and ascorbate, and antimicrobials, such as parabens, chlorobutanol, and phenol.

[0105] In some embodiments the composition comprises a binder as an excipient. Non-limiting examples of suitable binders include starches, pregelatinized starches, gelatin, polyvinylpyrrolidone, cellulose, methylcellulose, sodium carboxymethylcellulose, ethylcellulose, polyacrylamides, polyvinylloxazolidone, polyvinylalcohols, C₁₂-C₁₈ fatty

acid alcohol, polyethylene glycol, polyols, saccharides, oligosaccharides, and combinations thereof.

[0106] In some embodiments the composition comprises a lubricant as an excipient. Non-limiting examples of suitable lubricants include magnesium stearate, calcium stearate, zinc stearate, hydrogenated vegetable oils, sterotex, polyoxyethylene monostearate, talc, polyethyleneglycol, sodium benzoate, sodium lauryl sulfate, magnesium lauryl sulfate, and light mineral oil.

[0107] In some embodiments the composition comprises a dispersion enhancer as an excipient. Non-limiting examples of suitable dispersants include starch, alginic acid, polyvinylpyrrolidones, guar gum, kaolin, bentonite, purified wood cellulose, sodium starch glycolate, isoamorphous silicate, and microcrystalline cellulose as high HLB emulsifier surfactants.

[0108] In some embodiments the composition comprises a disintegrant as an excipient. In some embodiments the disintegrant is a non-effervescent disintegrant. Non-limiting examples of suitable non-effervescent disintegrants include starches such as corn starch, potato starch, pregelatinized and modified starches thereof, sweeteners, clays, such as bentonite, micro-crystalline cellulose, alginates, sodium starch glycolate, gums such as agar, guar, locust bean, karaya, pectin, and tragacanth. In some embodiments the disintegrant is an effervescent disintegrant. Non-limiting examples of suitable effervescent disintegrants include sodium bicarbonate in combination with citric acid, and sodium bicarbonate in combination with tartaric acid.

[0109] In some embodiments the excipient comprises a flavoring agent. Flavoring agents can be chosen from synthetic flavor oils and flavoring aromatics; natural oils; extracts from plants, leaves, flowers, and fruits; and combinations thereof. In some embodiments the flavoring agent is selected from cinnamon oils; oil of wintergreen; peppermint oils; clover oil; hay oil; anise oil; eucalyptus; vanilla; citrus oil such as lemon oil, orange oil, grape and grapefruit oil; and fruit essences including apple, peach, pear, strawberry, raspberry, cherry, plum, pineapple, and apricot.

[0110] In some embodiments the excipient comprises a sweetener. Non-limiting examples of suitable sweeteners include glucose (corn syrup), dextrose, invert sugar, fructose, and mixtures thereof (when not used as a carrier); saccharin and its various salts such as the sodium salt; dipeptide sweeteners such as aspartame; dihydrochalcone compounds, glycyrrhizin; Stevia Rebaudiana (Stevioside); chloro derivatives of sucrose such as sucralose; and sugar alcohols such as sorbitol, mannitol,

sylitol, and the like. Also contemplated are hydrogenated starch hydrolysates and the synthetic sweetener 3,6-dihydro-6-methyl-1,2,3-oxathiazin-4-one-2,2-dioxide, particularly the potassium salt (acesulfame-K), and sodium and calcium salts thereof.

[0111] In some embodiments the composition comprises a coloring agent. Non-limiting examples of suitable color agents include food, drug and cosmetic colors (FD&C), drug and cosmetic colors (D&C), and external drug and cosmetic colors (Ext. D&C). The coloring agents can be used as dyes or their corresponding lakes.

[0112] The weight fraction of the excipient or combination of excipients in the formulation is usually about 99% or less, such as about 95% or less, about 90% or less, about 85% or less, about 80% or less, about 75% or less, about 70% or less, about 65% or less, about 60% or less, about 55% or less, 50% or less, about 45% or less, about 40% or less, about 35% or less, about 30% or less, about 25% or less, about 20% or less, about 15% or less, about 10% or less, about 5% or less, about 2% or less, or about 1% or less of the total weight of the composition.

[0113] The bacterial compositions disclosed herein can be formulated into a variety of forms and administered by a number of different means. The compositions can be administered orally, rectally, or parenterally, in formulations containing conventionally acceptable carriers, adjuvants, and vehicles as desired. The term "parenteral" as used herein includes subcutaneous, intravenous, intramuscular, or intrasternal injection and infusion techniques. In an exemplary embodiment, the bacterial composition is administered orally.

[0114] Solid dosage forms for oral administration include capsules, tablets, caplets, pills, troches, lozenges, powders, and granules. A capsule typically comprises a core material comprising a bacterial composition and a shell wall that encapsulates the core material. In some embodiments the core material comprises at least one of a solid, a liquid, and an emulsion. In some embodiments the shell wall material comprises at least one of a soft gelatin, a hard gelatin, and a polymer. Suitable polymers include, but are not limited to: cellulosic polymers such as hydroxypropyl cellulose, hydroxyethyl cellulose, hydroxypropyl methyl cellulose (HPMC), methyl cellulose, ethyl cellulose, cellulose acetate, cellulose acetate phthalate, cellulose acetate trimellitate, hydroxypropylmethyl cellulose phthalate, hydroxypropylmethyl cellulose succinate and carboxymethylcellulose sodium; acrylic acid polymers and copolymers, such as those formed from acrylic acid, methacrylic acid, methyl acrylate, ammonio methacrylate, ethyl acrylate, methyl methacrylate and/or ethyl methacrylate (e.g., those copolymers

sold under the trade name "Eudragit"); vinyl polymers and copolymers such as polyvinyl pyrrolidone, polyvinyl acetate, polyvinylacetate phthalate, vinylacetate crotonic acid copolymer, and ethylene-vinyl acetate copolymers; and shellac (purified lac). In some embodiments at least one polymer functions as taste-masking agents.

[0115] Tablets, pills, and the like can be compressed, multiply compressed, multiply layered, and/or coated. The coating can be single or multiple. In one embodiment, the coating material comprises at least one of a saccharide, a polysaccharide, and glycoproteins extracted from at least one of a plant, a fungus, and a microbe. Non-limiting examples include corn starch, wheat starch, potato starch, tapioca starch, cellulose, hemicellulose, dextrans, maltodextrin, cyclodextrins, inulins, pectin, mannans, gum arabic, locust bean gum, mesquite gum, guar gum, gum karaya, gum ghatti, tragacanth gum, funori, carrageenans, agar, alginates, chitosans, or gellan gum. In some embodiments the coating material comprises a protein. In some embodiments the coating material comprises at least one of a fat and an oil. In some embodiments the at least one of a fat and an oil is high temperature melting. In some embodiments the at least one of a fat and an oil is hydrogenated or partially hydrogenated. In some embodiments the at least one of a fat and an oil is derived from a plant. In some embodiments the at least one of a fat and an oil comprises at least one of glycerides, free fatty acids, and fatty acid esters. In some embodiments the coating material comprises at least one edible wax. The edible wax can be derived from animals, insects, or plants. Non-limiting examples include beeswax, lanolin, bayberry wax, carnauba wax, and rice bran wax. Tablets and pills can additionally be prepared with enteric coatings.

[0116] Alternatively, powders or granules embodying the bacterial compositions disclosed herein can be incorporated into a food product. In some embodiments the food product is a drink for oral administration. Non-limiting examples of a suitable drink include fruit juice, a fruit drink, an artificially flavored drink, an artificially sweetened drink, a carbonated beverage, a sports drink, a liquid dairy product, a shake, an alcoholic beverage, a caffeinated beverage, infant formula and so forth. Other suitable means for oral administration include aqueous and nonaqueous solutions, emulsions, suspensions and solutions and/or suspensions reconstituted from non-effervescent granules, containing at least one of suitable solvents, preservatives, emulsifying agents, suspending agents, diluents, sweeteners, coloring agents, and flavoring agents.

[0117] In some embodiments the food product is a solid foodstuff. Suitable examples of a solid foodstuff include without limitation a food bar, a snack bar, a cookie, a brownie, a muffin, a cracker, an ice cream bar, a frozen yogurt bar, and the like.

[0118] In some embodiments, the compositions disclosed herein are incorporated into a therapeutic food. In some embodiments, the therapeutic food is a ready-to-use food that optionally contains some or all essential macronutrients and micronutrients. In some embodiments, the compositions disclosed herein are incorporated into a supplementary food that is designed to be blended into an existing meal. In some embodiments, the supplemental food contains some or all essential macronutrients and micronutrients. In some embodiments, the bacterial compositions disclosed herein are blended with or added to an existing food to fortify the food's protein nutrition. Examples include food staples (grain, salt, sugar, cooking oil, margarine), beverages (coffee, tea, soda, beer, liquor, sports drinks), snacks, sweets and other foods.

[0119] In one embodiment, the formulations are filled into gelatin capsules for oral administration. An example of an appropriate capsule is a 250 mg gelatin capsule containing from 10 (up to 100 mg) of lyophilized powder (10^8 to 10^{11} bacteria), 160 mg microcrystalline cellulose, 77.5 mg gelatin, and 2.5 mg magnesium stearate. In an alternative embodiment, from 10^5 to 10^{12} bacteria may be used, 10^5 to 10^7 , 10^6 to 10^7 , or 10^8 to 10^{10} , with attendant adjustments of the excipients if necessary. In an alternative embodiment an enteric-coated capsule or tablet or with a buffering or protective composition may be used.

[0120] In one embodiment, the number of bacteria of each type may be present in the same amount or in different amounts. For example, in a bacterial composition with two types of bacteria, the bacteria may be present in from a 1:10,000 ratio to a 1:1 ratio, from a 1:10,000 ratio to a 1:1,000 ratio, from a 1:1,000 ratio to a 1:100 ratio, from a 1:100 ratio to a 1:50 ratio, from a 1:50 ratio to a 1:20 ratio, from a 1:20 ratio to a 1:10 ratio, from a 1:10 ratio to a 1:1 ratio. For bacterial compositions comprising at least three types of bacteria, the ratio of type of bacteria may be chosen pairwise from ratios for bacterial compositions with two types of bacteria. For example, in a bacterial composition comprising bacteria A, B, and C, at least one of the ratio between bacteria A and B, the ratio between bacteria B and C, and the ratio between bacteria A and C may be chosen, independently, from the pairwise combinations above.

[0121] **Methods of Treating a Subject.** In some embodiments the proteins and compositions disclosed herein are administered to a patient or a user (sometimes

collectively referred to as a “subject”). As used herein “administer” and “administration” encompasses embodiments in which one person directs another to consume a bacterial composition in a certain manner and/or for a certain purpose, and also situations in which a user uses a bacteria composition in a certain manner and/or for a certain purpose independently of or in variance to any instructions received from a second person. Non-limiting examples of embodiments in which one person directs another to consume a bacterial composition in a certain manner and/or for a certain purpose include when a physician prescribes a course of conduct and/or treatment to a patient, when a parent commands a minor user (such as a child) to consume a bacterial composition, when a trainer advises a user (such as an athlete) to follow a particular course of conduct and/or treatment, and when a manufacturer, distributor, or marketer recommends conditions of use to an end user, for example through advertisements or labeling on packaging or on other materials provided in association with the sale or marketing of a product.

[0122] The bacterial compositions offer a protective and/or therapeutic effect against infection by one or more GI pathogens of interest and thus may be administered after an acute case of infection has been resolved in order to prevent relapse, during an acute case of infection as a complement to antibiotic therapy if the bacterial composition is not sensitive to the same antibiotics as the GI pathogen, or to prevent infection or reduce transmission from disease carriers. These pathogens include, but are not limited to, *Aeromonas hydrophila*, *Campylobacter fetus*, *Plesiomonas shigelloides*, *Bacillus cereus*, *Campylobacter jejuni*, *Clostridium botulinum*, *Clostridium difficile*, *Clostridium perfringens*, enteroaggregative *Escherichia coli*, enterohemorrhagic *Escherichia coli*, enteroinvasive *Escherichia coli*, enterotoxigenic *Escherichia coli* (LT and/or ST), *Escherichia coli* 0157:H7, *Helicobacter pylori*, *Klebsiella pneumonia*, *Lysteria monocytogenes*, *Plesiomonas shigelloides*, *Salmonella* spp., *Salmonella typhi*, *Shigella* spp., *Staphylococcus*, *Staphylococcus aureus*, vancomycin-resistant *Enterococcus* spp., *Vibrio* spp., *Vibrio cholerae*, *Vibrio parahaemolyticus*, *Vibrio vulnificus*, and *Yersinia enterocolitica*.

[0123] In one embodiment, the pathogen may be *Clostridium difficile*, *Salmonella* spp., pathogenic *Escherichia coli*, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL) and vancomycin-resistant *Enterococci* (VRE). In yet another embodiment, the pathogen may be *Clostridium difficile*.

[0124] The present bacterial compositions may be useful in a variety of clinical situations. For example, the bacterial compositions may be administered as a complementary treatment to antibiotics when a patient is suffering from an acute infection, to reduce the risk of recurrence after an acute infection has subsided, or when a patient will be in close proximity to others with or at risk of serious gastrointestinal infections (physicians, nurses, hospital workers, family members of those who are ill or hospitalized).

[0125] The present bacterial compositions may be administered to animals, including humans, laboratory animals (e.g., primates, rats, mice), livestock (e.g., cows, sheep, goats, pigs, turkeys, chickens), and household pets (e.g., dogs, cats, rodents).

[0126] In the present method, the bacterial composition is administered enterically, in other words by a route of access to the gastrointestinal tract. This includes oral administration, rectal administration (including enema, suppository, or colonoscopy), by an oral or nasal tube (nasogastric, nasojejunal, oral gastric, or oral jejunal), as detailed more fully herein.

Pretreatment Protocols

[0127] Prior to administration of the bacterial composition, the patient may optionally have a pretreatment protocol to prepare the gastrointestinal tract to receive the bacterial composition. In certain embodiments, the pretreatment protocol is advisable, such as when a patient has an acute infection with a highly resilient pathogen. In other embodiments, the pretreatment protocol is entirely optional, such as when the pathogen causing the infection is not resilient, or the patient has had an acute infection that has been successfully treated but where the physician is concerned that the infection may recur. In these instances, the pretreatment protocol may enhance the ability of the bacterial composition to affect the patient's microbiome.

[0128] As one way of preparing the patient for administration of the microbial ecosystem, at least one antibiotic may be administered to alter the bacteria in the patient. As another way of preparing the patient for administration of the microbial ecosystem, a standard colon-cleansing preparation may be administered to the patient to substantially empty the contents of the colon, such as used to prepare a patient for a colonoscopy. By "substantially emptying the contents of the colon," this application means removing at least 75%, at least 80%, at least 90%, at least 95%, or about 100% of the contents of the ordinary volume of colon contents. Antibiotic treatment may precede the colon-cleansing protocol.

[0129] If a patient has received an antibiotic for treatment of an infection, or if a patient has received an antibiotic as part of a specific pretreatment protocol, in one embodiment the antibiotic should be stopped in sufficient time to allow the antibiotic to be substantially reduced in concentration in the gut before the bacterial composition is administered. In one embodiment, the antibiotic may be discontinued 1, 2, or 3 days before the administration of the bacterial composition. In one embodiment, the antibiotic may be discontinued 3, 4, 5, 6, or 7 antibiotic half-lives before administration of the bacterial composition. In another embodiment, the antibiotic may be chosen so the constituents in the bacterial composition have an MIC₅₀ that is higher than the concentration of the antibiotic in the gut.

[0130] MIC₅₀ of a bacterial composition or the elements in the composition may be determined by methods well known in the art. Reller et al., Antimicrobial Susceptibility Testing: A Review of General Principles and Contemporary Practices, Clinical Infectious Diseases 49(11):1749-1755 (2009). In such an embodiment, the additional time between antibiotic administration and administration of the bacterial composition is not necessary. If the pretreatment protocol is part of treatment of an acute infection, the antibiotic may be chosen so that the infection is sensitive to the antibiotic, but the constituents in the bacterial composition are not sensitive to the antibiotic.

Routes of Administration

[0131] The bacterial compositions of the invention are suitable for administration to mammals and non-mammalian animals in need thereof. In certain embodiments, the mammalian subject is a human subject who has one or more symptoms of a dysbiosis.

[0132] When the mammalian subject is suffering from a disease, disorder or condition characterized by an aberrant microbiota, the bacterial compositions described herein are suitable for treatment thereof. In some embodiments, the mammalian subject has not received antibiotics in advance of treatment with the bacterial compositions. For example, the mammalian subject has not been administered at least two doses of vancomycin, metronidazole and/or or similar antibiotic compound within one week prior to administration of the therapeutic composition. In other embodiments, the mammalian subject has not previously received an antibiotic compound in the one month prior to administration of the therapeutic composition. In other embodiments, the mammalian subject has received one or more treatments with one or more different antibiotic

compounds and such treatment(s) resulted in no improvement or a worsening of symptoms.

[0133] In some embodiments, the gastrointestinal disease, disorder or condition is diarrhea caused by *C. difficile* including recurrent *C. difficile* infection, ulcerative colitis, colitis, Crohn's disease, or irritable bowel disease. Beneficially, the therapeutic composition is administered only once prior to improvement of the disease, disorder or condition. In some embodiments the therapeutic composition is administered at intervals greater than two days, such as once every three, four, five or six days, or every week or less frequently than every week. Or the preparation may be administered intermittently according to a set schedule, e.g., once a day, once weekly, or once monthly, or when the subject relapses from the primary illness. In another embodiment, the preparation may be administered on a long-term basis to subjects who are at risk for infection with or who may be carriers of these pathogens, including subjects who will have an invasive medical procedure (such as surgery), who will be hospitalized, who live in a long-term care or rehabilitation facility, who are exposed to pathogens by virtue of their profession (livestock and animal processing workers), or who could be carriers of pathogens (including hospital workers such as physicians, nurses, and other health care professionals).

[0134] In embodiments, the bacterial composition is administered enterically. This preferentially includes oral administration, or by an oral or nasal tube (including nasogastric, nasojejunal, oral gastric, or oral jejunal). In other embodiments, administration includes rectal administration (including enema, suppository, or colonoscopy). The bacterial composition may be administered to at least one region of the gastrointestinal tract, including the mouth, esophagus, stomach, small intestine, large intestine, and rectum. In some embodiments it is administered to all regions of the gastrointestinal tract. The bacterial compositions may be administered orally in the form of medicaments such as powders, capsules, tablets, gels or liquids. The bacterial compositions may also be administered in gel or liquid form by the oral route or through a nasogastric tube, or by the rectal route in a gel or liquid form, by enema or instillation through a colonoscope or by a suppository.

[0135] If the composition is administered colonoscopically and, optionally, if the bacterial composition is administered by other rectal routes (such as an enema or suppository) or even if the subject has an oral administration, the subject may have a colon-cleansing preparation. The colon-cleansing preparation can facilitate proper use of

the colonoscope or other administration devices, but even when it does not serve a mechanical purpose it can also maximize the proportion of the bacterial composition relative to the other organisms previously residing in the gastrointestinal tract of the subject. Any ordinarily acceptable colon-cleansing preparation may be used such as those typically provided when a subject undergoes a colonoscopy.

Dosages and Schedule for Administration

[0136] In some embodiments the bacteria and bacterial compositions are provided in a dosage form. In some embodiments the dosage form is designed for administration of at least one OTU or combination thereof disclosed herein, wherein the total amount of bacterial composition administered is selected from 0.1ng to 10g, 10ng to 1g, 100ng to 0.1g, 0.1mg to 500mg, 1mg to 100mg, or from 10-15mg. In some embodiments the bacterial composition is consumed at a rate of from 0.1ng to 10g a day, 10ng to 1g a day, 100ng to 0.1g a day, 0.1mg to 500mg a day, 1mg to 100mg a day, or from 10-15mg a day, or more.

[0137] In some embodiments the treatment period is at least 1 day, at least 2 days, at least 3 days, at least 4 days, at least 5 days, at least 6 days, at least 1 week, at least 2 weeks, at least 3 weeks, at least 4 weeks, at least 1 month, at least 2 months, at least 3 months, at least 4 months, at least 5 months, at least 6 months, or at least 1 year. In some embodiments the treatment period is from 1 day to 1 week, from 1 week to 4 weeks, from 1 month, to 3 months, from 3 months to 6 months, from 6 months to 1 year, or for over a year.

[0138] In one embodiment, from 10^5 and 10^{12} microorganisms total may be administered to the patient in a given dosage form. In one mode, an effective amount may be provided in from 1 to 500 ml or from 1 to 500 grams of the bacterial composition having from 10^7 to 10^{11} bacteria per ml or per gram, or a capsule, tablet or suppository having from 1 mg to 1000 mg lyophilized powder having from 10^7 to 10^{11} bacteria. Those receiving acute treatment may receive higher doses than those who are receiving chronic administration (such as hospital workers or those admitted into long-term care facilities).

[0139] Any of the preparations described herein may be administered once on a single occasion or on multiple occasions, such as once a day for several days or more than once a day on the day of administration (including twice daily, three times daily, or up to five times daily). Or the preparation may be administered intermittently according to a set schedule, e.g., once weekly, once monthly, or when the patient relapses from

the primary illness. In another embodiment, the preparation may be administered on a long-term basis to individuals who are at risk for infection with or who may be carriers of these pathogens, including individuals who will have an invasive medical procedure (such as surgery), who will be hospitalized, who live in a long-term care or rehabilitation facility, who are exposed to pathogens by virtue of their profession (livestock and animal processing workers), or who could be carriers of pathogens (including hospital workers such as physicians, nurses, and other health care professionals).

Patient Selection

[0140] Particular bacterial compositions may be selected for individual patients or for patients with particular profiles. For example, 16S sequencing may be performed for a given patient to identify the bacteria present in his or her microbiota. The sequencing may either profile the patient's entire microbiome using 16S sequencing (to the family, genera, or species level), a portion of the patient's microbiome using 16S sequencing, or it may be used to detect the presence or absence of specific candidate bacteria that are biomarkers for health or a particular disease state, such as markers of multi-drug resistant organisms or specific genera of concern such as *Escherichia*. Based on the biomarker data, a particular composition may be selected for administration to a patient to supplement or complement a patient's microbiota in order to restore health or treat or prevent disease. In another embodiment, patients may be screened to determine the composition of their microbiota to determine the likelihood of successful treatment.

Combination Therapy

[0141] The bacterial compositions may be administered with other agents in a combination therapy mode, including anti-microbial agents and prebiotics. Administration may be sequential, over a period of hours or days, or simultaneous.

[0142] In one embodiment, the bacterial compositions are included in combination therapy with one or more anti-microbial agents, which include anti-bacterial agents, anti-fungal agents, anti-viral agents and anti-parasitic agents.

[0143] Anti-bacterial agents include cephalosporin antibiotics (cephalexin, cefuroxime, cefadroxil, cefazolin, cephalothin, cefaclor, cefamandole, cefoxitin, cefprozil, and ceftobiprole); fluoroquinolone antibiotics (cipro, Levaquin, floxin, tequin, avelox, and norflox); tetracycline antibiotics (tetracycline, minocycline, oxytetracycline, and doxycycline); penicillin antibiotics (amoxicillin, ampicillin, penicillin V, dicloxacillin, carbenicillin, vancomycin, and methicillin); and carbapenem antibiotics (ertapenem, doripenem, imipenem/cilastatin, and meropenem).

[0144] Anti-viral agents include Abacavir, Acyclovir, Adefovir, Amprenavir, Atazanavir, Cidofovir, Darunavir, Delavirdine, Didanosine, Docosanol, Efavirenz, Elvitegravir, Emtricitabine, Enfuvirtide, Etravirine, Famciclovir, Foscarnet, Fomivirsen, Ganciclovir, Indinavir, Idoxuridine, Lamivudine, Lopinavir Maraviroc, MK-2048, Nelfinavir, Nevirapine, Penciclovir, Raltegravir, Rilpivirine, Ritonavir, Saquinavir, Stavudine, Tenofovir Trifluridine, Valaciclovir, Valganciclovir, Vidarabine, Ibacitabine, Amantadine, Oseltamivir, Rimantidine, Tipranavir, Zalcitabine, Zanamivir and Zidovudine.

[0145] Examples of antifungal compounds include, but are not limited to polyene antifungals such as natamycin, rimocidin, filipin, nystatin, amphotericin B, candicin, and hamycin; imidazole antifungals such as miconazole, ketoconazole, clotrimazole, econazole, omoconazole, bifonazole, butoconazole, fenticonazole, isoconazole, oxiconazole, sertaconazole, sulconazole, and tioconazole; triazole antifungals such as fluconazole, itraconazole, isavuconazole, ravuconazole, posaconazole, voriconazole, terconazole, and albaconazole; thiazole antifungals such as abafungin; allylamine antifungals such as terbinafine, naftifine, and butenafine; and echinocandin antifungals such as anidulafungin, caspofungin, and micafungin. Other compounds that have antifungal properties include, but are not limited to polygodial, benzoic acid, ciclopirox, tolnaftate, undecylenic acid, flucytosine or 5-fluorocytosine, griseofulvin, and haloprogin.

[0146] In one embodiment, the bacterial compositions are included in combination therapy with one or more corticosteroids, mesalazine, mesalamine, sulfasalazine, sulfasalazine derivatives, immunosuppressive drugs, cyclosporin A, mercaptopurine, azathiopurine, prednisone, methotrexate, antihistamines, glucocorticoids, epinephrine, theophylline, cromolyn sodium, anti-leukotrienes, anti-cholinergic drugs for rhinitis, anti-cholinergic decongestants, mast-cell stabilizers, monoclonal anti-IgE antibodies, vaccines, and combinations thereof.

[0147] A prebiotic is a selectively fermented ingredient that allows specific changes, both in the composition and/or activity in the gastrointestinal microbiota that confers benefits upon host well-being and health. Prebiotics may include complex carbohydrates, amino acids, peptides, or other essential nutritional components for the survival of the bacterial composition. Prebiotics include, but are not limited to, amino acids, biotin, fructooligosaccharide, galactooligosaccharides, inulin, lactulose, mannan

oligosaccharides, oligofructose-enriched inulin, oligofructose, oligodextrose, tagatose, trans-galactooligosaccharide, and xylooligosaccharides.

Methods for Characterization of Bacterial Compositions

[0148] In certain embodiments, provided are methods for testing certain characteristics of bacterial compositions. For example, the sensitivity of bacterial compositions to certain environmental variables is determined, e.g., in order to select for particular desirable characteristics in a given composition, formulation and/or use. For example, the constituents in the bacterial composition may be tested for pH resistance, bile acid resistance, and/or antibiotic sensitivity, either individually on a constituent-by-constituent basis or collectively as a bacterial composition comprised of multiple bacterial constituents (collectively referred to in this section as bacterial composition).

[0149] pH Sensitivity Testing. If a bacterial composition will be administered other than to the colon or rectum (i.e., through, for example, but not limited to, an oral route), optionally testing for pH resistance enhances the selection of bacterial compositions that will survive at the highest yield possible through the varying pH environments of the distinct regions of the GI tract. Understanding how the bacterial compositions react to the pH of the GI tract also assists in formulation, so that the number of bacteria in a dosage form can be increased if beneficial and/or so that the composition may be administered in an enteric-coated capsule or tablet or with a buffering or protective composition. As the pH of the stomach can drop to a pH of 1 to 2 after a high-protein meal for a short time before physiological mechanisms adjust it to a pH of 3 to 4 and often resides at a resting pH of 4 to 5, and as the pH of the small intestine can range from a pH of 6 to 7.4, bacterial compositions can be prepared that survive these varying pH ranges (specifically wherein at least 1%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, or as much as 100% of the bacteria can survive gut transit times through various pH ranges). This may be tested by exposing the bacterial composition to varying pH ranges for the expected gut transit times through those pH ranges. Therefore, as a nonlimiting example only, 18-hour cultures of bacterial compositions may be grown in standard media, such as gut microbiota medium ("GMM", see Goodman et al., Extensive personal human gut microbiota culture collections characterized and manipulated in gnotobiotic mice, PNAS 108(15):6252-6257 (2011)) or another animal-products-free medium, with the addition of pH adjusting agents for a pH of 1 to 2 for 30 minutes, a pH of 3 to 4 for 1 hour, a pH of 4 to 5 for 1 to 2 hours, and a pH of 6 to 7.4 for 2.5 to 3 hours. An alternative method for testing stability to acid is

described in U.S. Patent No. 4,839,281. Survival of bacteria may be determined by culturing the bacteria and counting colonies on appropriate selective or non-selective media.

[0150] Bile Acid Sensitivity Testing. Additionally, in some embodiments, testing for bile-acid resistance enhances the selection of bacterial compositions that will survive exposures to bile acid during transit through the GI tract. Bile acids are secreted into the small intestine and can, like pH, affect the survival of bacterial compositions. This may be tested by exposing the bacterial compositions to bile acids for the expected gut exposure time to bile acids. For example, bile acid solutions may be prepared at desired concentrations using 0.05 mM Tris at pH 9 as the solvent. After the bile acid is dissolved, the pH of the solution may be adjusted to 7.2 with 10% HCl. Bacterial compositions may be cultured in 2.2 ml of a bile acid composition mimicking the concentration and type of bile acids in the patient, 1.0 ml of 10% sterile-filtered feces media and 0.1 ml of an 18-hour culture of the given strain of bacteria. Incubations may be conducted for from 2.5 to 3 hours or longer. An alternative method for testing stability to bile acid is described in U.S. Patent No. 4,839,281. Survival of bacteria may be determined by culturing the bacteria and counting colonies on appropriate selective or non-selective media.

[0151] Antibiotic Sensitivity Testing. As a further optional sensitivity test, bacterial compositions may be tested for sensitivity to antibiotics. In one embodiment, bacterial compositions may be chosen so that the bacterial constituents are sensitive to antibiotics such that if necessary they can be eliminated or substantially reduced from the patient's gastrointestinal tract by at least one antibiotic targeting the bacterial composition.

[0152] Adherence to Gastrointestinal Cells. The bacterial compositions may optionally be tested for the ability to adhere to gastrointestinal cells. A method for testing adherence to gastrointestinal cells is described in U.S. Patent No. 4,839,281.

[0153] The specification is most thoroughly understood in light of the teachings of the references cited within the specification. The embodiments within the specification provide an illustration of embodiments and should not be construed to limit the scope. The skilled artisan readily recognizes that many other embodiments are encompassed. All publications and patents cited in this disclosure are incorporated by reference in their entirety. To the extent the material incorporated by reference contradicts or is

inconsistent with this specification, the specification will supersede any such material. The citation of any references herein is not an admission that such references are prior art.

[0154] Unless otherwise indicated, all numbers expressing quantities of ingredients, reaction conditions, and so forth used in the specification, including claims, are to be understood as being modified in all instances by the term “about.” Accordingly, unless otherwise indicated to the contrary, the numerical parameters are approximations and may vary depending upon the desired properties sought to be obtained. At the very least, and not as an attempt to limit the application of the doctrine of equivalents to the scope of the claims, each numerical parameter should be construed in light of the number of significant digits and ordinary rounding approaches.

[0155] Unless otherwise indicated, the term “at least” preceding a series of elements is to be understood to refer to every element in the series.

EXAMPLES

[0156] Below are examples of specific embodiments for carrying out the present invention. The examples are offered for illustrative purposes only, and are not intended to limit the scope of the present invention in any way. Efforts have been made to ensure accuracy with respect to numbers used (e.g., amounts, temperatures, etc.), but some experimental error and deviation should, of course, be allowed for. Examples of the techniques and protocols described herein with regard to therapeutic compositions can be found in, e.g., Remington's Pharmaceutical Sciences, 16th edition, Osol, A. (ed), 1980.

[0157] **Example 1.** Construction of binary pairs in a high-throughput 96-well format. To allow high-throughput screening of binary pairs, vials of -80 °C glycerol stock banks were thawed and diluted to 1e8 CFU/mL. Each strain was then diluted 10x (to a final concentration of 1e7 CFU/mL of each strain) into 200 uL of PBS + 15% glycerol in the wells of a 96-well plate. Plates were then frozen at -80 °C. When needed, plates were removed from -80°C and thawed at room temperature under anaerobic conditions when testing in a CivSim with *Clostridium difficile*.

[0158] **Example 2.** Construction of ternary combinations in a high-throughput 96-well format. To allow high-throughput screening of ternary combinations, vials of -80 °C glycerol stock banks were thawed and diluted to 1e8 CFU/mL. Each strain was then diluted 10x (to a final concentration of 1e7 CFU/mL of each strain) into 200 uL of PBS + 15% glycerol in the wells of a 96-well plate. Plates were then frozen at -80 °C. When

needed for the assay, plates were removed from -80 °C and thawed at room temperature under anaerobic conditions when testing in a CivSim with *Clostridium difficile*.

[0159] **Example 3.** Construction of a CivSim Assay to Screen for Ecobiotic™ compositions Inhibitory to the Growth of *Clostridium difficile*. An overnight culture of *Clostridium difficile* was grown under anaerobic conditions in SweetB-FosIn or other suitable media for the growth of *C. difficile*. SweetB-FosIn is a complex media composed of brain heart infusion, yeast extract, cysteine, cellobiose, maltose, soluble starch, and fructooligosaccharides/inulin, and hemin, and is buffered with MOPs. After 24 hr of growth the culture was diluted 100,000 fold into a complex media such as SweetB-FosIn which is suitable for the growth of a wide variety of anaerobic bacterial species. The diluted *C. difficile* mixture was then aliquoted to wells of a 96-well plate (180 uL to each well). 20 uL of a unique binary pair of potential inhibitory species was then added to each well at a final concentration of 1e6 CFU/mL of each species. Alternatively the assay can be tested with binary pairs at different initial concentrations (1e9 CFU/mL, 1e8 CFU/mL, 1e7 CFU/mL, 1e5 CFU/mL, 1e4 CFU/mL, 1e3 CFU/mL, 1e2 CFU/mL). Control wells only inoculated with *C. difficile* were included for a comparison to the growth of *C. difficile* without inhibition. Additional wells were used for controls that either inhibit or do not inhibit the growth of *C. difficile*. One example of a positive control that inhibits growth was a combination of *Blautia producta*, *Clostridium bifermentans* and *Escherichia coli*. One example of a control that shows reduced inhibition of *C. difficile* growth as a combination of *Bacteroides thetaiotaomicron*, *Bacteroides ovatus* and *Bacteroides vulgatus*. Plates were wrapped with parafilm and incubated for 24 hr at 37 °C under anaerobic conditions. After 24 hr the wells containing *C. difficile* alone were serially diluted and plated to determine titer. The 96-well plate was then frozen at -80C before quantifying *C. difficile* by qPCR assay.

[0160] **Example 4.** Construction of a CivSim Assay to Screen for bacterial compositions that produce diffusible products inhibitory to the growth of *Clostridium difficile* using a filter insert. The CivSim assay described above was modified by using a 0.22 uM filter insert (Millipore™ MultiScreen™ 96-Well Assay Plates - Item MAGVS2210) in 96-well format to physically separate *C. difficile* from the bacterial compositions. The *C. difficile* was aliquoted into the 96-well plate while the bacterial compositions were aliquoted into media on the filter overlay. The nutrient media as in

contact on both sides of the 0.22 μ M filter, allowing exchange of nutrients, small molecules and many macromolecules (e.g., bacteriocins, cell-surface proteins, or polysaccharides) by diffusion. In this embodiment, after 24 hr incubation, the filter insert containing the bacterial compositions was removed. The plate containing *C. difficile* was then transferred to a 96-well plate reader suitable for measuring optical density (OD) at 600 nm. The growth of *C. difficile* in the presence of different bacterial compositions was compared based on the OD measurement.

[0161] **Example 5.** Construction of a CivSim Assay to Screen for bacterial compositions inhibitory to the growth of *Clostridium difficile* using *Clostridium difficile* selective media for quantification. The CivSim assay described above can be modified to determine final *C. difficile* titer by serially diluting and plating to *C. difficile* selective media (Bloedt et al 2009) such as CCFA (cycloserine cefoxitin fructose agar, Anaerobe Systems), CDSA (*Clostridium difficile* selective agar, which is cycloserine cefoxitin mannitol agar, Becton Dickinson).

[0162] **Example 6. Quantification of *C. difficile* using Quantitative PCR (qPCR)**

A. Standard Curve Preparation

[0163] The standard curve was generated from a well on each assay plate containing only pathogenic *C. difficile* grown in SweetB + FosIn media as provided herein and quantified by selective spot plating. Serial dilutions of the culture were performed in sterile phosphate-buffered saline. Genomic DNA was extracted from the standard curve samples along with the other wells.

B. Genomic DNA Extraction

[0164] Genomic DNA was extracted from 5 μ L of each sample using a dilution, freeze/thaw, and heat lysis protocol. 5 μ L of thawed samples were added to 45 μ L of UltraPure water (Life Technologies, Carlsbad, CA) and mixed by pipetting. The plates with diluted samples were frozen at -20 °C until use for qPCR which includes a heated lysis step prior to amplification. Alternatively the genomic DNA could be isolated using the Mo Bio Powersoil[®]-htp 96 Well Soil DNA Isolation Kit (Mo Bio Laboratories, Carlsbad, CA), Mo Bio Powersoil[®] DNA Isolation Kit (Mo Bio Laboratories, Carlsbad, CA), or the QIAamp DNA Stool Mini Kit (QIAGEN, Valencia, CA) according to the manufacturer's instructions.

C. qPCR Composition and Conditions

[0165] The qPCR reaction mixture contained 1x SsoAdvanced Universal Probes Supermix, 900 nM of Wr-tcdB-F primer (AGCAGTTGAATATAGTGGTTTGTAGAGTTG, IDT, Coralville, IA), 900 nM of Wr-tcdB-R primer (CATGCTTTTTTAGTTTCTGGATTGAA, IDT, Coralville, IA), 250 nM of Wr-tcdB-P probe (6FAM-CATCCAGTCTCAATTGTATATGTTTCTCCA-MGB, Life Technologies, Grand Island, NY), and Molecular Biology Grade Water (Mo Bio Laboratories, Carlsbad, CA) to 18 μ l (Primers adapted from: Wroblewski, D. et al., Rapid Molecular Characterization of *Clostridium difficile* and Assessment of Populations of *C. difficile* in Stool Specimens, *Journal of Clinical Microbiology* 47:2142–2148 (2009)). This reaction mixture was aliquoted to wells of a Hard-shell Low-Profile Thin Wall 96-well Skirted PCR Plate (BioRad, Hercules, CA). To this reaction mixture, 2 μ l of diluted, frozen, and thawed samples were added and the plate sealed with a Microseal 'B' Adhesive Seal (BioRad, Hercules, CA). The qPCR was performed on a BioRad C1000™ Thermal Cycler equipped with a CFX96™ Real-Time System (BioRad, Hercules, CA). The thermocycling conditions were 95°C for 15 minutes followed by 45 cycles of 95°C for 5 seconds, 60°C for 30 seconds, and fluorescent readings of the FAM channel. Alternatively, the qPCR could be performed with other standard methods known to those skilled in the art.

D. Data Analysis

[0166] The C_q value for each well on the FAM channel was determined by the CFX Manager™ 3.0 software. The log₁₀(cfu/mL) of *C. difficile* each experimental sample was calculated by inputting a given sample's C_q value into a linear regression model generated from the standard curve comparing the C_q values of the standard curve wells to the known log₁₀(cfu/mL) of those samples. The log inhibition was calculated for each sample by subtracting the log₁₀(cfu/mL) of *C. difficile* in the sample from the log₁₀(cfu/mL) of *C. difficile* in the sample on each assay plate used for the generation of the standard curve that has no additional bacteria added. The mean log inhibition was calculated for all replicates for each composition.

[0167] A histogram of the range and standard deviation of each composition was plotted. Ranges or standard deviations of the log inhibitions that were distinct from the overall distribution were examined as possible outliers. If the removal of a single log inhibition datum from one of the binary pairs that were identified in the histograms would

bring the range or standard deviation in line with those from the majority of the samples, that datum was removed as an outlier, and the mean log inhibition was recalculated.

[0168] The pooled variance of all samples evaluated in the assay was estimated as the average of the sample variances weighted by the sample's degrees of freedom. The pooled standard error was then calculated as the square root of the pooled variance divided by the square root of the number of samples. Confidence intervals for the null hypothesis were determined by multiplying the pooled standard error to the z score corresponding to a given percentage threshold. Mean log inhibitions outside the confidence interval were considered to be inhibitory if positive or stimulatory if negative with the percent confidence corresponding to the interval used. Samples with mean log inhibition greater than the 99% confidence interval (C.I.) of the null hypothesis are reported as +++++, those with a 95% < C.I. <99% as +++, those with a 90% < C.I. <95% as ++, those with a 80% < C.I. <90% as + while samples with mean log inhibition less than than the 99% confidence interval (C.I.) of the null hypothesis are reported as -----, those with a 95% < C.I. <99% as ---, those with a 90% < C.I. <95% as --, those with a 80% < C.I. <90% as -.

[0169] Many binary pairs inhibit *C. difficile* Table 5. 622 of 989 combinations show inhibition with a confidence interval >80%; 545 of 989 with a C.I. > 90%; 507 of 989 with a C.I. > 95%; 430 of 989 with a C.I. of >99%. Non-limiting but exemplary binary pairs include those with mean log reduction greater than 0.366, e.g. *Allistipes shahii* paired with *Blautia producta*, *Clostridium hathaweyi*, or *Colinsella aerofaciens*, or *Clostridium mayombeii* paired with *C. innocuum*, *C. tertium*, *Colinsella aerofaciens*, or any of the other 424 combinations shown in Table 5. Equally important, the CivSim assay describes binary pairs that do not effectively inhibit *C. difficile*. 188 of 989 combinations promote growth with >80% confidence; 52 of 989 show a lack of inhibition with >90% confidence; 22 of 989 show a lack of inhibition with >95% confidence; 3 of 989, including *B. producta* combined with *Coprococcus catus*, *Alistipes shahii* combined with *Dorea formicigenerans*, and *Eubacterium rectale* combined with *Roseburia intestinalis*, show a lack of inhibition with >99% confidence. 249 of 989 combinations are neutral in the assay, meaning they neither promote nor inhibit *C. difficile* growth to the limit of measurement.

[0170] Ternary combinations with mean log inhibition greater than 0.312 are reported as +++++ ($\geq$ 99% confidence interval (C.I.) of the null hypothesis), those with mean log inhibition between 0.221 and 0.312 as +++ (95% < C.I. <99%), those with

mean log inhibition between 0.171 and 0.221 as ++ (90% < C.I. < 95%), those with mean log inhibition between 0.113 and 0.171 as + (80% < C.I. < 90%), those with mean log inhibition between -0.113 and -0.171 as - (80% < C.I. < 90%), those with mean log inhibition between -0.171 and -0.221 as -- (90% < C.I. < 95%), those with mean log inhibition between -0.221 and -0.312 as --- (95% < C.I. < 99%), and those with mean log inhibition less than -0.312 as ---- (99% < C.I.).

[0171] The CivSim shows that many ternary combinations inhibit *C. difficile*. 39 of 56 combinations show inhibition with a confidence interval >80%; 36 of 56 with a C.I. > 90%; 36 of 56 with a C.I. > 95%; 29 of 56 with a C.I. of >99%. Non-limiting but exemplary ternary combinations include those with mean log reduction greater than 0.171, e.g. any combination shown in Table 6 with a score of +++, such as *Colinsella aerofaciens*, *Coprococcus comes*, and *Blautia producta*. Equally important, the CivSim assay describes ternary combinations that do not effectively inhibit *C. difficile*. 5 of 56 combinations promote growth with >80% confidence; 2 of 56 promote growth with >90% confidence; 1 of 56, *Coprococcus comes*, *Clostridium symbiosum* and *Eubacterium rectale*, promote growth with >95% confidence. 12 of 56 combinations are neutral in the assay, meaning they neither promote nor inhibit *C. difficile* growth to the limit of measurement.

Example P1. Full 16S Sequencing to Determine Operational Taxonomic Unit (OTU)

A. Genomic DNA Extraction

[0172] Genomic DNA is extracted from pure microbial cultures using a hot alkaline lysis method. 2 µl of microbial culture is added to 18 µl of Lysis Buffer (25mM NaOH, 0.2 mM EDTA) and the mixture is incubated at 95°C for 30 minutes. Subsequently, the samples are cooled to 4°C and neutralized by the addition of 20 µl of Neutralization Buffer (40 mM Tris-HCl) and then diluted 10-fold in Elution Buffer (10 mM Tris-HCl). Alternatively, genomic DNA is extracted from pure microbial cultures using commercially available kits such as the Mo Bio Ultraclean® Microbial DNA Isolation Kit (Mo Bio Laboratories, Carlsbad, CA) or by standard methods known to those skilled in the art.

B. PCR

[0173] To amplify bacterial 16S rDNA, 2 µl of extracted gDNA is added to a 20 µl final volume PCR reaction. The PCR reaction also contains 1x HotMasterMix (5PRIME, Gaithersburg, MD), 250 nM of 27f primer (AGRGTTTGATCMTGGCTCAG, IDT,

Coralville, IA), and 250 nM of 1492r primer (TACGGYTACCTTGTTAYGACTT, IDT, Coralville, IA), with Molecular Biology Grade Water (Mo Bio Laboratories, Carlsbad, CA) for the balance of the volume. Alternatively, other universal bacterial primers or thermostable polymerases known to those skilled in the art are used.

[0174] The PCR performed on commercially available thermocyclers such as a BioRad MyCycler™ Thermal Cycler (BioRad, Hercules, CA). The reactions are run at 94°C for 2 minutes followed by 30 cycles of 94°C for 30 seconds, 51°C for 30 seconds, and 68°C for 1 minute 30 seconds, followed by a 7 minute extension at 72°C and an indefinite hold at 4°C. Following PCR, gel electrophoresis of a portion of the reaction products is used to confirm successful amplification of a ~1.5 kb product.

C. PCR Cleanup

[0175] To remove nucleotides and oligonucleotides from the PCR products, 1 µl of HT ExoSap-IT (Affymetrix, Santa Clara, CA) is added to 2.5 µl of PCR product followed by a 15 minute incubation at 37°C and then a 15 minute inactivation at 80°C.

D. Sanger Sequencing

[0176] For each sample, two sequencing reactions are performed, one using each primer: 27f and 1492r. 40 ng of ExoSap-IT-cleaned PCR products are mixed with 25 pmol of sequencing primer and Molecular Biology Grade Water (Mo Bio Laboratories, Carlsbad, CA) to 15 µl total volume. This reaction is submitted to a commercial sequencing organization such as Genewiz (South Plainfield, NJ) for Sanger sequencing.

Example P2. V4 16S Sequencing to Determine Operational Taxonomic Unit (OTU)

A. Genomic DNA Extraction

[0177] Genomic DNA is extracted from pure microbial cultures using a hot alkaline lysis method. 2 µl of microbial culture is added to 18 µl of Lysis Buffer (25 mM NaOH, 0.2 mM EDTA) and the mixture is incubated at 95°C for 30 minutes. Subsequently, the samples are cooled to 4°C and neutralized by the addition of 18 µl of Neutralization Buffer (40 mM Tris-HCl) and then diluted 10-fold in Elution Buffer (10 mM Tris-HCl). Alternatively, genomic DNA is extracted from pure microbial cultures using commercially available kits such as the Mo Bio Ultraclean® Microbial DNA Isolation Kit (Mo Bio Laboratories, Carlsbad, CA) or by standard methods known to those in skilled in the art.

B. PCR

[0178] To amplify the V4 region of bacterial 16S rDNA, 2 µl of extracted gDNA is added to a 20 µl final volume PCR reaction. The PCR reaction also contains 1x HotMasterMix (5PRIME, Gaithersburg, MD), 200 nM of V4_515f_adapt (AATGATACGGCGACCAACGAGATCTACACTATGGTAATTGTGTGCCAGCMGCCGCGGTAA, IDT, Coralville, IA), and 200 nM of barcoded 806rbc (CAAGCAGAAGACGGCATACGAGAT_12bpGolayBarcode_AGTCAGTCAGCCGGACTACHVGGGTWTCTAAT, IDT, Coralville, IA), with Molecular Biology Grade Water (Mo Bio Laboratories, Carlsbad, CA) for the balance of the volume. These primers incorporate adapters for Illumina sequencing by synthesis. Optionally, identical replicate, triplicate, or quadruplicate reactions may be performed. Alternatively other universal bacterial primers or thermostable polymerases known to those skilled in the art are used.

[0179] The PCR performed on commercially available thermocyclers such as a BioRad MyCycler™ Thermal Cycler (BioRad, Hercules, CA). The reactions are run at 94°C for 3 minutes followed by 25 cycles of 94°C for 45 seconds, 50°C for 1 minute, and 72°C for 1 minute 30 seconds, followed by a 10 minute extension at 72°C and a indefinite hold at 4°C. Following PCR, gel electrophoresis of a portion of the reaction products is used to confirm successful amplification of a ~0.4 kb product.

C. PCR Cleanup

[0180] To remove nucleotides and oligonucleotides from the PCR products, the entire remaining volume of the PCR, or of the multiple PCRs, is cleaned up using the Mo Bio Ultraclean®-htp 96 Well PCR Clean-up Kit (Mo Bio Laboratories, Carlsbad, CA) according to the manufacturer's instructions or other commercially available kits such as the QIAquick 96 PCR Purification Kit (QIAGEN, Valencia, CA).

D. DNA Quantification & Pooling

[0181] The cleaned PCR products are quantified using the Quant-iT™ PicoGreen® dsDNA Assay Kit (Life Technologies, Grand Island, NY) according to the manufacturer's instructions. Following quantification, the barcoded cleaned PCR products are combined such that each distinct PCR product is at an equimolar ratio to create a prepared Illumina library.

E. Illumina Sequencing

[0182] The prepared library is sequenced on Illumina HiSeq or MiSeq sequencers (Illumina, San Diego, CA) with cluster generation, template hybridization, iso-thermal

amplification, linearization, blocking and denaturization and hybridization of the sequencing primers performed according to the manufacturer's instructions. 16SV4SeqFw (TATGGTAATTGTGTGCCAGCMGCCGCGGTAA), 16SV4SeqRev (AGTCAGTCAGCCGGACTACHVGGGTWTCTAAT), and 16SV4Index (ATTAGAWACCCBDGTAGTCCGGCTGACTGACT) (IDT, Coralville, IA) are used for sequencing. This sequencing can optionally be performed by a contract research organization such as Metanome (Houston, TX), Ambry Genetics (Aliso Viejo, CA), Edge Bio (Gaithersburg, MD), or Covance (Princeton, NJ).

J. Taxonomic Assignment to Sequence Read Data

Nucleic acid sequences are analyzed and taxonomic and phylogenetic assignments of specific OTUs are made using sequence similarity and phylogenetic methods that are well known to those skilled in the art, including but not limited to maximum likelihood phylogenetic reconstruction (see e.g. Liu K, Linder CR, and Warnow T. 2011. RAXML and FastTree: Comparing Two Methods for Large-Scale Maximum Likelihood Phylogeny Estimation. *PLoS ONE* **6**: e27731. McGuire G, Denham MC, and Balding DJ. 2001. Models of sequence evolution for DNA sequences containing gaps. *Mol. Biol. Evol* **18**: 481–490. Wróbel B. 2008. Statistical measures of uncertainty for branches in phylogenetic trees inferred from molecular sequences by using model-based methods. *J. Appl. Genet.* **49**: 49–67.) From these taxonomic assignments OTUs in the dataset are defined. The certainty of the OTU call is defined based on the OTU's sequence similarity to a reference nucleic acid sequence and the proximity of the OTU sequence relative to one or more reference sequences in the phylogeny. The specificity of an OTU's taxonomic and phylogenetic assignment determines whether the match is assigned at the level of Family, Genus, Species, or Strain, and the confidence of this assignment is determined based on the position of bootstrap supported branches in the reference phylogenetic tree relative to the placement of the OTU sequence being interrogated.

Example P3. Construction of an *In Vitro* Assay to Screen for Combinations of Microbes Inhibitory to the Growth of Pathogenic *E. coli*

[0183] The *in vitro* assay is used to screen for combinations of bacteria inhibitory to the growth of *E. coli* by modifying the media used for growth of the pathogen inoculum. One of several choices of media is used for growth of the pathogen such as Reinforced Clostridial Media (RCM), Brain Heart Infusion Broth (BHI) or Luria Bertani

Broth (LB) (also known as Lysogeny Broth). *E. coli* is quantified by using alternative selective media specific for *E. coli* or using qPCR probes specific for the pathogen. For example, aerobic growth on MacConkey lactose medium selects for enteric Gram negatives, including *E. coli*. qPCR is conducted using probes specific for the shiga toxin of pathogenic *E. coli*.

EXAMPLE P4. Construction of an *In Vitro* Assay to Screen for Combinations of Microbes Inhibitory to the Growth of Vancomycin-Resistant Enterococcus (VRE)

[0184] The *in vitro* assay is used to screen for combinations of bacteria inhibitory to the growth of Vancomycin-Resistant Enterococcus spp. (VRE) by modifying the media used for growth of the pathogen inoculum. Several choices of media are used for growth of the pathogen such as Reinforced Clostridial Media (RCM), Brain Heart Infusion Broth (BHI) or Luria Bertani Broth (LB). VRE is quantified by using alternative selective media specific for VRE or using qPCR probes specific for the pathogen. For example, m-Enterococcus agar containing sodium azide is selective for Enterococcus spp. and a small number of other species. Probes specific to the van genes conferring vancomycin resistance are used in the qPCR.

EXAMPLE P5. Testing of Bacterial Composition Against Salmonella

[0185] The *in vitro* assay is used to screen for combinations of bacteria inhibitory to the growth of Salmonella spp. by modifying the media used for growth of the pathogen inoculum. Several choices of media are used for growth of the pathogen such as Reinforced Clostridial Media (RCM), Brain Heart Infusion Broth (BHI) or Luria Bertani Broth (LB). Salmonella spp. are quantified by using alternative selective media specific for Salmonella spp. or using qPCR probes specific for the pathogen. For example, MacConkey agar is used to select for Salmonella spp. and the *invA* gene is targeted with qPCR probes; this gene encodes an invasion protein carried by many pathogenic Salmonella spp. and is used in invading eukaryotic cells.

EXAMPLE P6. Method of Preparing the Bacterial Composition for Administration to a Subject

[0186] Two strains for the bacterial composition are independently cultured and mixed together before administration. Both strains are independently be grown at 37°C, pH 7, in a GMM or other animal-products-free medium, pre-reduced with 1 g/L cysteine•HCl. After each strain reaches a sufficient biomass, it is preserved for banking by adding 15% glycerol and then frozen at -80°C in 1 ml cryotubes.

[0187] Each strain is then be cultivated to a concentration of 10^{10} CFU/mL, then concentrated 20-fold by tangential flow microfiltration; the spent medium is exchanged by diafiltering with a preservative medium consisting of 2% gelatin, 100 mM trehalose, and 10 mM sodium phosphate buffer, or other suitable preservative medium. The suspension is freeze-dried to a powder and titrated.

[0188] After drying, the powder is blended with microcrystalline cellulose and magnesium stearate and formulated into a 250 mg gelatin capsule containing 10 mg of lyophilized powder (10^8 to 10^{11} bacteria), 160 mg microcrystalline cellulose, 77.5 mg gelatin, and 2.5 mg magnesium stearate.

EXAMPLE P7. Method of Treating a Subject with a Bacterial Composition

[0189] A patient has suffered from recurrent bouts of *C. difficile*. In the most recent acute phase of illness, the patient is treated with an antibiotic sufficient to ameliorate the symptoms of the illness. In order to prevent another relapse of *C. difficile*, the patient is administered one of the present bacterial compositions. Specifically, the patient is administered *Bacillus circulans* and *Roseburia inulinivorans* at a dose of 10^8 bacteria total in a lyophilized form, specifically in a 250 mg gelatin capsule containing 10 mg of lyophilized bacteria, 160 mg microcrystalline cellulose, 77.5 mg gelatin, and 2.5 mg magnesium stearate. The patient takes the capsule by mouth and resumes a normal diet after 4, 8, 12, or 24 hours. In another embodiment, the patient may take the capsule by mouth before, during, or immediately after a meal.

[0190] Feces is collected before and at 1 day, 3 days, 1 week, and 1 month after administration. The presence of *C. difficile* is found in the feces before administration of the bacterial composition, but feces collections after administration show reducing (such as at least 50% less, 60%, 70%, 80%, 90%, or 95%) to no detectable levels of *C. difficile*, as measured by qPCR, as described above. ELISA for toxin protein or traditional microbiological identification techniques may also be used.

[0191] As another measure of patient success, a positive response may be defined as absence of diarrhea, which itself is defined as 3 or more loose or watery stools per day for at least 2 consecutive days or 8 or more loose or watery stools in 48 hours, or persisting diarrhea (due to other causes) with repeating (three times) negative stool tests for toxins of *C. difficile*.

[0192] Treatment failure is defined as persisting diarrhea with a positive *C. difficile* toxin stool test or no reduction in levels of *C. difficile*, as measured by qPCR

sequencing. ELISA or traditional microbiological identification techniques may also be used.

EXAMPLE P8. Method of Treating a Subject with a Bacterial Composition

[0193] A patient has suffered from recurrent bouts of *C. difficile*. In the most recent acute phase of illness, the patient is treated with an antibiotic sufficient to ameliorate the symptoms of the illness. In order to prevent another relapse of *C. difficile*, the patient is administered one of the present bacterial compositions. Specifically, the patient is administered a bacterial composition containing two bacterial types from Table 1 or Table 3, or a combination from Table 2, at a dose of 10^8 bacteria total in a lyophilized form formulated in an enteric coated capsule. Example of the patient or samples derived from the patient is expected to demonstrate at least one measure of success as described herein (reducing levels of *C. difficile* as measured by qPCR, ELISA, or traditional microbiological identification; absence of diarrhea; persisting diarrhea with repeating (three times) negative stool tests for toxins of *C. difficile*).

[0194] Other embodiments will be apparent to those skilled in the art from consideration of the specification and practice of the embodiments. Consider the specification and examples as exemplary only, with a true scope and spirit being indicated by the following claims.

TABLE 1

OTU	Domain	Phylum	Class	Order	Family	Genus
Abiotrophia defectiva	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Abiotrophia
Abiotrophia para-adiacens	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Abiotrophia
Abiotrophia sp. oral clone P4PA_155 P1	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Abiotrophia
Acetanaerobacterium elongatum	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Acetanaerobacterium
Acetivibrio cellulolyticus	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Acetivibrio
Acetivibrio ethanoligignens	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Acetivibrio
Acetobacter aceti	Bacteria	Proteobacteria	Rhodospirillales	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter fabarum	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter lovaniensis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter malorum	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter orientalis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter pasteurianus	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter pomorum	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter syzygii	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacter tropicalis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Acetobacter
Acetobacteraceae bacterium AT-5844	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	unclassified
Acholeplasma laidlawii	Bacteria	Tenericutes	Mollicutes	Acholeplasmatales	Acholeplasmataceae	Acholeplasma
Achromobacter denitrificans	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Achromobacter
Achromobacter prehaudii	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Achromobacter
Achromobacter xylosoxidans	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	Achromobacter
Acidaminococcus fermentans	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Acidaminococcaceae	Acidaminococcus
Acidaminococcus intestini	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Acidaminococcaceae	Acidaminococcus
Acidaminococcus sp. D21	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Acidaminococcaceae	Acidaminococcus
Acidilobus saccharovorans	Archaea	Crenarchaeota	Thermoprotei	Acidilobales	Acidilobaceae	Acidilobus
Acidithiobacillus ferrooxidans	Bacteria	Proteobacteria	Gammaproteobacteria	Acidithiobacillales	Acidithiobacillaceae	Acidithiobacillus
Acidovorax sp. 98-G3B33	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Acidovorax
Acidovorax sp. c109	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
Acinetobacter baumannii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter calcoaceticus	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter genomsp. C1	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter haemolyticus	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter johnsonii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter junii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter lwoffii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter parvus	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter radioresistens	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter schindleri	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. 56A1	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. CIP 101934	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. CIP 102143	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. CIP 53.82	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. M16-22	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. RH2624	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Acinetobacter sp. SH924	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Acinetobacter
Actinobacillus minor	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Actinobacillus
Actinobacillus pleuropneumoniae	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Actinobacillus
Actinobacillus succinogenes	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Actinobacillus
Actinobacillus succinogenes	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Actinobacillus
Actinobacillus ureae	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Actinobacillus
Actinobaculum massiliae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinobaculum
Actinobaculum schaalii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinobaculum
Actinobaculum sp. 8M#101342	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinobaculum
Actinobaculum sp. P2P_19 P1	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinobaculum

TABLE 1

<i>Actinomyces cardiffensis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces europaeus</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces funkei</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces genomosp. C1</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces genomosp. C2</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces genomosp. P1 oral clone MB6_C03</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces georgiae</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces israelii</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces massiliensis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces meyeri</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces naeslundii</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces nasicola</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces neuii</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces odontolyticus</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces oricola</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces orihominis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces oris</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. 7400942</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. c109</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. CCUG 37290</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. ChDC 8137</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. GEJ15</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. HKU31</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. ICM34</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. ICM41</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. ICM47</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. ICM54</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. M2231/94/1</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone GU009</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone GU067</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone IQ076</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone IQ077</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone IP073</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone IP081</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral clone JA063</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral taxon 170</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral taxon 171</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral taxon 178</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral taxon 180</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral taxon 848</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. oral taxon C55</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces sp. TeJ5</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces urogenitalis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Actinomyces viscosus</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Actinomyces
<i>Adlercreutzia equihofiens</i>	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Adlercreutzia
<i>Aerococcus sanguinicola</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Aerococcus
<i>Aerococcus urinae</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Aerococcus
<i>Aerococcus urinaeequi</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Aerococcus
<i>Aerococcus viridans</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Aerococcus
<i>Aeromicrobium marinum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardioideaceae	Aeromicrobium
<i>Aeromicrobium sp. JCI4</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardioideaceae	Aeromicrobium
<i>Aeromonas allosaccharophila</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	Aeromonas
<i>Aeromonas enteropelogenes</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	Aeromonas
<i>Aeromonas hydrophila</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	Aeromonas

TABLE 1

<i>Aeromonas jandaei</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i>
<i>Aeromonas salmonicida</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i>
<i>Aeromonas trota</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i>
<i>Aeromonas veronii</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Aeromonadaceae	<i>Aeromonas</i>
<i>Aflipia genomosp. 4</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	<i>Aflipia</i>
<i>Aggregatibacter actinomycetemcomitans</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter</i>
<i>Aggregatibacter aphrophilus</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter</i>
<i>Aggregatibacter segnis</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Aggregatibacter</i>
<i>Agrobacterium radiobacter</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Agrobacterium</i>
<i>Agrobacterium tumefaciens</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Agrobacterium</i>
<i>Agrococcus jenensis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	<i>Agrococcus</i>
<i>Akkermansia muciniphila</i>	Bacteria	Verrucomicrobia	Verrucomicrobiae	Verrucomicrobiales	Verrucomicrobiaceae	<i>Akkermansia</i>
<i>Alcaligenes faecalis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Alcaligenes</i>
<i>Alcaligenes sp. CO14</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Alcaligenes</i>
<i>Alcaligenes sp. 53</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Alcaligenes</i>
<i>Allicyclobacillus acidocaidarius</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Allicyclobacillus acidoterrestris</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Allicyclobacillus contaminans</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Allicyclobacillus cycloheptanicus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Allicyclobacillus herbarius</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Allicyclobacillus pomorum</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Allicyclobacillus sp. CCUG 53762</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Allicyclobacillaceae	<i>Allicyclobacillus</i>
<i>Alistipes finegoldii</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes indistinctus</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes onderdonkii</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes putredinis</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes shahii</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes sp. HG85</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes sp. JC50</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alistipes sp. RMA 9912</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Rikenellaceae	<i>Alistipes</i>
<i>Alkaliphilus metalliredigenes</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	<i>Alkaliphilus</i>
<i>Alkaliphilus oremlandii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	<i>Alkaliphilus</i>
<i>Alloscardovia omnicolens</i>	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	<i>Alloscardovia</i>
<i>Alloscardovia sp. QB7196</i>	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	<i>Alloscardovia</i>
<i>Anaerobaculum hydrogeniformans</i>	Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	<i>Anaerobaculum</i>
<i>Anaerobiospirillum succiniciproducens</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Succinivibrionaceae	<i>Anaerobiospirillum</i>
<i>Anaerobiospirillum thomasi</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Succinivibrionaceae	<i>Anaerobiospirillum</i>
<i>Anaerococcus hydrogenalis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus lactolyticus</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus octavius</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus prevotii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. 8404299</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. 8405254</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. 9401487</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. 9403502</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. gpac104</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. gpac126</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. gpac155</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. gpac199</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus sp. gpac215</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus tetradus</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerococcus vaginalis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Anaerococcus</i>
<i>Anaerofustis stercorihominis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	<i>Anaerofustis</i>
<i>Anaeroglobus geminatus</i>	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	<i>Anaeroglobus</i>

TABLE 1

Anaerosporeobacter mobilis	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Anaerosporeobacter
Anaerostipes cacciae	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Anaerostipes
Anaerostipes sp. 3_2_56FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Anaerostipes
Anaerotruncus colihominis	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Anaerotruncus
Anaplasma marginale	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Anaplasma
Anaplasma phagocytophilum	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Anaplasma
Aneurinibacillus aneurinilyticus	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Aneurinibacillus
Aneurinibacillus danicus	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Aneurinibacillus
Aneurinibacillus migulanus	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Aneurinibacillus
Aneurinibacillus terranovaensis	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Aneurinibacillus
Aneurinibacillus thermoaerophilus	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	Aneurinibacillus
Anoxybacillus contaminans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Anoxybacillus
Anoxybacillus flavithermus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Anoxybacillus
Arcanobacterium haemolyticum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Arcanobacterium
Arcanobacterium pyogenes	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Trueperella
Arcobacter butzleri	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteraceae	Arcobacter
Arcobacter cryaerophilus	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteraceae	Arcobacter
Arthrobacter agilis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter
Arthrobacter ariaiensis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter
Arthrobacter bengerei	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter
Arthrobacter globiformis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter
Arthrobacter nicotianae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Arthrobacter
Atopobium minutum	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium parvulum	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium rimae	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium sp. BS2	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium sp. F0209	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium sp. ICM42b10	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium sp. ICM57	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Atopobium vaginae	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Atopobium
Aurantimonas coralicida	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Aurantimonadaceae	Aurantimonas
Aurantimonas altamirensis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Aurantimonadaceae	Aurantimonas
Auritidibacter lignavus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Auritidibacter
Averyella dahnousiensis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Averyella
Bacillus aeolus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus aerophilus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus aestuarii	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus alcalophilus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus amyloliquefaciens	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus atrophaeus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus badius	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus cereus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus circulans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus clausii	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus coagulans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus firmus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus flexus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus fordl	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus gelatin	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus halmapalus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus halodurans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus herbersteinensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus horti	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus idriensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus

TABLE 1

Bacillus lentus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus licheniformis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus megaterium	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus nealsonii	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus niabensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus niacini	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus pocheonensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus pumilus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus safensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus simplex	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sonorensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. 10403023 MM10403188	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. 2_A_57_CT2	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. 2008724126	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. 2008724139	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. 7-16A1A	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. 9-3A1A	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. AP8	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. B27(2008)	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. BT18_CT2	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. GR1.1	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. GB9	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. HU19.1	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. HU29	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. HU33.1	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. JC6	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. oral taxon F26	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. oral taxon F28	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. oral taxon F79	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. SRC_DS1	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. SRC_DS10	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. SRC_DS12	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. SRC_DS16	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. tcd99	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sp. zh168	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus sphaericus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Lysinibacillus
Bacillus sporothermodurans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus subtilis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus thermoamylovorans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus thuringiensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacillus weihenstephanensis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Bacillus
Bacteroides bacterium ph8	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P2 oral clone MB1_G13	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P3 oral clone MB1_G34	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P4 oral clone MB2_G17	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P5 oral clone MB2_P04	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P6 oral clone MB3_C19	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P7 oral clone MB3_P19	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides genomosp. P8 oral clone MB4_G15	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	unclassified	unclassified
Bacteroides acidifaciens	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides barnesiiae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides caccae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides cellulosilyticus	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides

69

[illegible]

TABLE 1

Bacteroides sp. N8-8	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides sp. W142	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides sp. XB12B	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides sp. XB44A	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides stercoris	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides thetaiotaomicron	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides uniformis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides ureolyticus	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	Campylobacter
Bacteroides vulgatus	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroides xylanisolvens	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Bacteroidetes bacterium oral taxon D27	Bacteria	Bacteroidetes	unclassified	unclassified	unclassified	unclassified
Bacteroidetes bacterium oral taxon F31	Bacteria	Bacteroidetes	unclassified	unclassified	unclassified	unclassified
Bacteroidetes bacterium oral taxon F44	Bacteria	Bacteroidetes	unclassified	unclassified	unclassified	unclassified
Barnesiella intestihominis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Barnesiella
Barnesiella viscericola	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Barnesiella
Bartonella bacilliformis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bartonellaceae	Bartonella
Bartonella grahamii	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bartonellaceae	Bartonella
Bartonella henselae	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bartonellaceae	Bartonella
Bartonella quintana	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bartonellaceae	Bartonella
Bartonella tamiiae	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bartonellaceae	Bartonella
Bartonella washoensis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bartonellaceae	Bartonella
Bdellovibrio sp. MPA	Bacteria	Proteobacteria	Deltaproteobacteria	Bdellovibrionales	Bdellovibrionaceae	Bdellovibrio
Bifidobacteriaceae genomosp. C1	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	unclassified	unclassified
Bifidobacterium adolescentis	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium angulatum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium animalis	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium bifidum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium breve	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium catenulatum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium gallium	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium infantis	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium kashiwanohense	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium longum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium pseudocatenulatum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium pseudolongum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium scardovii	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium sp. HM2	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium sp. HMLN12	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium sp. M45	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium sp. M5X5B	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium sp. TM-7	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium thermophilum	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bifidobacterium urinalis	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Bifidobacterium
Bilophila wadsworthia	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfobibrionales	Desulfobibrionaceae	Allosterculia
Bisgaard Taxon	Bacteria	Proteobacteria	Gammaaproteobacteria	Pasteurellales	Pasteurellaceae	Pasteurella
Blastomonas natatoria	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Blastomonas
Blautia coecoides	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia glucerasea	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia glucerasei	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia hansenii	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia hydrogenotrophica	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia luti	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia producta	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Blautia schinkii	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia

TABLE 1

<i>Blautia</i> sp. M25	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Blautia</i>
<i>Blautia stercoris</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Blautia</i>
<i>Blautia wexlerae</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Blautia</i>
<i>Brachybacterium alimentarium</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dermabacteraceae	<i>Brachybacterium</i>
<i>Brachybacterium conglomeratum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dermabacteraceae	<i>Brachybacterium</i>
<i>Brachybacterium tyrofermentans</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dermabacteraceae	<i>Brachybacterium</i>
<i>Brachyspira aalborgi</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Brachyspiraceae	<i>Brachyspira</i>
<i>Brachyspira pilosicoli</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Brachyspiraceae	<i>Brachyspira</i>
<i>Brachyspira</i> sp. H153	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Brachyspiraceae	<i>Brachyspira</i>
<i>Brachyspira</i> sp. H154	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Brachyspiraceae	<i>Brachyspira</i>
<i>Brachyspira</i> sp. H155	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Brachyspiraceae	<i>Brachyspira</i>
<i>Brevibacillus agi</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus brevis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus centrosporus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus choshinensis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus invocatus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus laterosporus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus parabrevis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus reuszeri</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus</i> sp. pH8	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacillus thermotuber</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Brevibacillus</i>
<i>Brevibacterium aurantiacum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium casei</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium epidermidis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium frigoritolerans</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>
<i>Brevibacterium linens</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium mcbrenneri</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium paucivorans</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium sanguinis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium</i> sp. H15	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevibacterium</i> sp. JC43	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Brevibacteriaceae	<i>Brevibacterium</i>
<i>Brevundimonas subvibrioides</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacteriales	Caulobacteraceae	<i>Brevundimonas</i>
<i>Bryantella formatexigens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Bryantella</i>
<i>Buchnera aphidicola</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Buchnera</i>
<i>Bulleidia extructa</i>	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	<i>Bulleidia</i>
<i>Butyricoccus pullicaecorum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	<i>Butyricoccus</i>
<i>Butyricimonas virosa</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Butyricimonas</i>
<i>Butyrivibrio crossotus</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Butyrivibrio</i>
<i>Butyrivibrio fibrisolvens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Butyrivibrio</i>
<i>Caldimonas manganoxidans</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	<i>Caldimonas</i>
<i>Caminicella sporogenes</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	<i>Caminicella</i>
<i>Candidatus Arthromitus</i> sp. SFB-mouse-Yit	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	<i>Candidatus Arthromitus</i>
<i>Candidatus Sulcia muelleri</i>	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Candidatus Sulcia</i>
<i>Capnocytophaga canimorsus</i>	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga genomosp. C1</i>	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga gingivalis</i>	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga granulosa</i>	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga ochracea</i>	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga</i> sp. GE18	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga</i> sp. oral clone AH015	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga</i> sp. oral clone ASCH05	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga</i> sp. oral clone ID062	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga</i> sp. oral strain A47RDY	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>
<i>Capnocytophaga</i> sp. oral strain S3	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	<i>Capnocytophaga</i>

TABLE 1

Capnocytophaga sp. oral taxon 338	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	Capnocytophaga
Capnocytophaga sp. S1b	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	Capnocytophaga
Capnocytophaga sputigena	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	Capnocytophaga
Cardiobacterium hominis	Bacteria	Proteobacteria	Gammaproteobacteria	Cardiobacteriales	Cardiobacteriaceae	Cardiobacterium
Cardiobacterium valvarum	Bacteria	Proteobacteria	Gammaproteobacteria	Cardiobacteriales	Cardiobacteriaceae	Cardiobacterium
Cardobacterium divergens	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Cardobacterium
Cardobacterium maltaromaticum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Cardobacterium
Catabacter hongkongensis	Bacteria	Firmicutes	Clostridia	Clostridiales	Catabacteriaceae	Catabacter
Catenibacterium mitsuoka	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Catenibacterium
Catonella genomosp. P1 oral clone MB5_P12	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Catonella
Catonella morbi	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Catonella
Catonella sp. oral clone FL037	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Catonella
Cedecea davisae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Cedecea
Cellulosimicrobium funkei	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Promicromonosporaceae	Cellulosimicrobium
Cetobacterium somerae	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Cetobacterium
Chlamydiales bacterium NS11	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	unclassified	unclassified
Chlamydiales bacterium NS13	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	unclassified	unclassified
Chlamydiales bacterium NS16	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	unclassified	unclassified
Chloroflexi genomosp. P1	Bacteria	Chloroflexi	unclassified	unclassified	unclassified	unclassified
Christensenella minuta	Bacteria	Firmicutes	Clostridia	Clostridiales	Christensenellaceae	Christensenella
Chromobacterium violaceum	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Chromobacterium
Chryseobacterium anthropi	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	Chryseobacterium
Chryseobacterium gleum	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	Chryseobacterium
Chryseobacterium hominis	Bacteria	Bacteroidetes	Flavobacteriia	Flavobacteriales	Flavobacteriaceae	Chryseobacterium
Citrobacter amalonaticus	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter braakii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter farmeri	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter freundii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter gilvii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter koseri	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter murini	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter rodentium	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter sedlakii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter sp. 30_2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter sp. KMS1-3	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter werkmanii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Citrobacter youngae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Citrobacter
Cloacibacillus evryensis	Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	Cloacibacillus
Clostridiaceae bacterium END-2	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	unclassified
Clostridiaceae bacterium JC13	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	unclassified
Clostridiales bacterium 1_7_47FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium 9400853	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium 9403326	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium oral clone P4PA_66 P1	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium oral taxon 093	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium oral taxon F32	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium ph2	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales bacterium SY8519	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales genomosp. BVAB3	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales sp. SM4/1	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridiales sp. SS3/4	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	Clostridiales
Clostridiales sp. SSC/2	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Clostridium acetobutylicum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
Clostridium aerotolerans	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium

TABLE 1

<i>Clostridium aldenense</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium aldrichii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium algidicarnis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium algidixylanolyticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium aminovaleicum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium amygdalinum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium argentinense</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium asparagiforme</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium baratii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium bartlettii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium beijerinckii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium bif fermentans</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium boiteae</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium butyricum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium cadaveris</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium carboxidivorans</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium carnis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium celatum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium celerecrescens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium cellulosi</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium chauvoei</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium citroniae</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium clariflavum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium clostridioforme</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium coccoides</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
<i>Clostridium cochlearium</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium coeleatum</i>	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
<i>Clostridium colicanis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium colinum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium disporicum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium estertheticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium fallax</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium favosporum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium felsineum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium frigidicarnis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium gasigenes</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium ghonii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium glycolicum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium glycyrrhizinilyticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium haemolyticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium hachewayi</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium hiranonis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium histolyticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium hylemonae</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium indolis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium innocuum</i>	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
<i>Clostridium irregulare</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium isatidis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium kluyveri</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium lactatifermentans</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium lavaleise</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium leptum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium limosum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium magnum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium

TABLE 1

<i>Clostridium malenominatum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium mayombi</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium methylpentosum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium nexile</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium novyi</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium orbiscindens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	Flavonifractor
<i>Clostridium oroticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium paraputrificum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium phytofermentans</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium piliforme</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium putrefaciens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium quinii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium ramosum</i>	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
<i>Clostridium rectum</i>	Bacteria	Fusobacteria	unclassified	unclassified	unclassified	unclassified
<i>Clostridium saccharogumia</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium saccharolyticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium saccharolyticum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium sardinense</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium sartagofforme</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium scindens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium septicum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium sordellii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium</i> sp. 7_2_43FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. D5	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. HGF2	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. HPB-46	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. JC122	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. L2-50	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. LMG 16094	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. M62/1	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. MUG055	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. MT4 F	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. NMBH1-1	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. NML 04A032	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. SS2/1	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. SY8519	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. TM-40	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. YIT 12069	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. YIT 12070	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. phenoides	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. spiroforme	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
<i>Clostridium</i> sp. sporogenes	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. sporosphaeroides	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. stercorarium	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. sticklandii	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Clostridium</i> sp. straminisolvens	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. subterminale	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. sulfidigenes	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. symbiosum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. tertium	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. tefani	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. thermocellum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. tyrobutyricum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
<i>Clostridium</i> sp. viride	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium

TABLE 1

Clostridium xylanolyticum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium
Collinsella aerofaciens	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella
Collinsella intestinalis	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella
Collinsella stercoris	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella
Collinsella tanakaei	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Collinsella
Comamonadaceae bacterium NML900135	Bacteria	Betaproteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	unclassified
Comamonadaceae bacterium NML790751	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	unclassified
Comamonadaceae bacterium NML910035	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	unclassified
Comamonadaceae bacterium NML910036	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	unclassified
Comamonadaceae bacterium oral taxon F47	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	unclassified
Comamonas sp. NSP5	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Comamonas
Conchiformibius kuhniiae	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Conchiformibius
Coprobacillus cateniformis	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Coprobacillus
Coprobacillus sp. 29_1	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Coprobacillus
Coprobacillus sp. D7	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Coprobacillus
Coprococcus catus	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Coprococcus
Coprococcus comes	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Coprococcus
Coprococcus eubactus	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Coprococcus
Coprococcus sp. ART55/1	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Coprococcus
Coriobacteriaceae bacterium BV3Ac1	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	unclassified
Coriobacteriaceae bacterium JC110	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	unclassified
Coriobacteriaceae bacterium phi	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	unclassified
Corynebacterium accolens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium ammoniagenes	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium appendicis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium argenteoratense	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium atypicum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium aurimucosum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium bovis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium canis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium casei	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium confusum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium coyleae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium durum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium efficiens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium falsenii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium flavescens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium genitalium	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium glaucum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium glucuronolyticum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium glutamicum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium hansenii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium imitans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium kroppenstedtii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium lipophiloflavum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium macginleyi	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium mastitidis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium matruchotii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium minutissimum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium mucifaciens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium propinquum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium pseudodiphtheriticum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium pseudogenitalium	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium pseudotuberculosis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium

TABLE 1

Corynebacterium pyruviciproducens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium renale	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium resistens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium riegeli	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium simulans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium singulare	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium sp. 1 ex sheep	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium sp. L-2012475	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium sp. NML 93-0481	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium sp. NML 97-0186	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium sp. NML 99-0018	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium sundsvallense	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium tuberculostrictum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium tuscaniae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium ulcerans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium ureicelerivorans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Corynebacterium variabile	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium
Cronobacter malonaticus	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Cronobacter
Cronobacter sakazakii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Cronobacter
Cronobacter turicensis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Cronobacter
Cryptobacterium curtum	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Cryptobacterium
Cupriavidus metallidurans	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Cupriavidus
Cytophaga xylanolytica	Bacteria	Bacteroidetes	Cytophaga	Cytophagales	Cytophagaceae	Cytophaga
Deferribacteres sp. oral clone JV001	Bacteria	Deferribacteres	Deferribacteres	unclassified	unclassified	unclassified
Deferribacteres sp. oral clone JV006	Bacteria	Deferribacteres	Deferribacteres	unclassified	unclassified	unclassified
Deferribacteres sp. oral clone JV023	Bacteria	Deferribacteres	Deferribacteres	unclassified	unclassified	unclassified
Deinococcus radiodurans	Bacteria	Deinococcus-Thermus	Deinococci	Deinococcales	Deinococcaceae	Deinococcus
Deinococcus sp. R-43880	Bacteria	Deinococcus-Thermus	Deinococci	Deinococcales	Deinococcaceae	Deinococcus
Delftia acidovorans	Bacteria	Proteobacteria	Burkholderiales	Burkholderiales	Comamonadaceae	Delftia
Dermabacter hominis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dermabacteraceae	Dermabacter
Dermacoccus sp. Elin185	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dermacoccaceae	Dermacoccus
Desmospora activa	Bacteria	Firmicutes	Bacilli	Bacillales	Thermoactinomycetaceae	Desmospora
Desmospora sp. 8437	Bacteria	Firmicutes	Bacilli	Bacillales	Thermoactinomycetaceae	Desmospora
Desulfotobacterium frappieri	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	Desulfotobacterium
Desulfotobacterium hafniense	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	Desulfotobacterium
Desulfobulbus sp. oral clone CH031	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfobacterales	Desulfobulbaceae	Desulfobulbus
Desulfotomaculum nigrificans	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	Desulfotomaculum
Desulfovibrio desulfuricans	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio
Desulfovibrio fairfieldensis	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio
Desulfovibrio piger	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio
Desulfovibrio sp. 3_1_syn3	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio
Desulfovibrio vulgaris	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfovibrionales	Desulfovibrionaceae	Desulfovibrio
Dialister invisus	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dialister microaerophilus	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dialister microaerophilus	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dialister pneumosintes	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dialister propionicifaciens	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dialister sp. oral taxon 502	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dialister succinatiphilus	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Dialister
Dietzia natronolimnaea	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dietziaceae	Dietzia
Dietzia sp. B9DF51	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dietziaceae	Dietzia
Dietzia sp. CA149	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dietziaceae	Dietzia
Dietzia timorensis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Dietziaceae	Dietzia
Dorea formicigenerans	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Dorea

TABLE 1

Dorea longicatena	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Dorea
Dysgonomonas gadei	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Dysgonomonas
Dysgonomonas mossii	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Dysgonomonas
Edwardsiella tarda	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Edwardsiella
Eggerthella lenta	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Eggerthella
Eggerthella sinensis	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Eggerthella
Eggerthella sp. 1_3_56fAA	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Eggerthella
Eggerthella sp. HGA1	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Eggerthella
Eggerthella sp. YV7918	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Eggerthella
Eikenella corrodens	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Eikenella
Enhydrobacter aerosaccus	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Enhydrobacter
Enterobacter aerogenes	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter asburiae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter cancerogenus	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter cloacae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter cowanii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter hormaechei	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter sp. 247BMC	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter sp. 638	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter sp. JC163	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter sp. SCSS	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacter sp. TSE38	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Enterobacter
Enterobacteriaceae bacterium 9_2_54fAA	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	unclassified
Enterobacteriaceae bacterium CF01Ent-1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	unclassified
Enterobacteriaceae bacterium Smarlab 3302238	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	unclassified
Enterococcus avium	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus caecae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus casseliflavus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus durans	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus faecalis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus faecium	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus gallinarum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus gilvus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus hawaiiensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus hirae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus italicus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus mundtii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus raffinosus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus sp. BV2CASA2	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus sp. CGRI-J6620	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus sp. F95	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus sp. RfL6	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus thailandicus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Enterococcus
Enterococcus coleocola	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Enterococcus
Erysipelothrix inopinata	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Erysipelothrix
Erysipelothrix rhusiopathiae	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Erysipelothrix
Erysipelothrix tonsillarum	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Erysipelothrix
Erysipelotrichaceae bacterium 3_1_53	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
Erysipelotrichaceae bacterium 5_2_54fAA	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
Escherichia albertii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Escherichia coli	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Escherichia fergusonii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Escherichia hermannii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Escherichia sp. 1_1_43	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia

TABLE 1

Escherichia sp. 4_i_40B	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Escherichia sp. B4	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Escherichia vulneris	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia
Ethanoligenens harbinense	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ethanoligenens
Eubacteriaceae bacterium P4P_50 P4	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	unclassified
Eubacterium barkeri	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium bifforme	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
Eubacterium brachy	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium budayi	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium callanderi	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium cellulosolvens	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium contortum	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium coprostanoligenes	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium cylindroides	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
Eubacterium desmolans	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium dolichum	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
Eubacterium eligens	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium fissicatena	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium hadrum	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Anaerostipes
Eubacterium halli	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium infirmum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII, Incertae Sedis	unclassified
Eubacterium limosum	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium moniforme	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium multiforme	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium nitrigenes	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium nodatum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII, Incertae Sedis	unclassified
Eubacterium ramulus	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium rectale	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium ruminantium	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium saburreum	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Lachnoanaerobaculum
Eubacterium saphenum	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium siraeum	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. 3_1_33	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. AS15b	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. QBR9	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone G103B	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone IR009	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone JH012	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone J1012	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone JN08B	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone JS001	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. oral clone OH3A	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium sp. WAL 14571	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium tenue	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
Eubacterium tortuosum	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	unclassified
Eubacterium ventriosum	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium xylinophilum	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Eubacterium
Eubacterium yurii	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
Ewingella americana	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Ewingella
Exiguobacterium acetylicum	Bacteria	Firmicutes	Bacilli	Bacillales	unclassified	Exiguobacterium
Facklamia hominis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Aerococcaceae	Facklamia
Faecalibacterium prausnitzii	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Faecalibacterium
Filifactor aliois	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	Filifactor
Filifactor villosus	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	Filifactor

TABLE 1

Finnegoldia magna	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	Finnegoldia
Flavobacteriaceae genomosp. C1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	unclassified
Flavobacterium sp. NF2-1	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Flavobacterium
Flavonifractor plautii	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	unclassified
Flexispira rappini	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	Flexispira
Flexistipes sinuarabici	Bacteria	Deferribacteres	Deferribacteres	Deferribacteriales	Deferribacteriaceae	Flexistipes
Francisella novicida	Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Francisellaceae	Francisella
Francisella philomiragia	Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Francisellaceae	Francisella
Fulvimonas sp. NML 060897	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Fulvimonas
Fusobacterium canifelinum	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium genomosp. C1	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium genomosp. C2	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium gonidiaformans	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium mortiferum	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium naviforme	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium necrogenes	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium necrophorum	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium nucleatum	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium periodonticum	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium russii	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J_1_1_41FAA	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J1_3_2	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J2_18	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J2_1_31	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J3_1_27	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J3_1_33	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J3_1_36A2	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. J3_1_5R	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. ACJ18	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. ACB2	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. AS2	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. CM1	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. CM21	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. CM22	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. D12	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. oral clone ASCF06	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium sp. oral clone ASCF11	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium ulcerans	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Fusobacterium varium	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Fusobacteriaceae	Fusobacterium
Gardnerella vaginalis	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Gardnerella
Gemella haemolysans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillales Family XI, Incertae Sedis	Gemella
Gemella morbillorum	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillales Family XI, Incertae Sedis	Gemella
Gemella sanguinis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillales Family XI, Incertae Sedis	Gemella
Gemella sp. oral clone ASCE02	Bacteria	Firmicutes	Bacilli	Bacillales	unclassified	Gemella
Gemella sp. oral clone ASCF04	Bacteria	Firmicutes	Bacilli	Bacillales	unclassified	Gemella
Gemella sp. oral clone ASCF12	Bacteria	Firmicutes	Bacilli	Bacillales	unclassified	Gemella
Gemella sp. WAL 1945j	Bacteria	Firmicutes	Bacilli	Bacillales	unclassified	Gemella
Gemmiger formicilis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	Gemmiger
Geobacillus kaustophilus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacillus sp. E263	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacillus sp. WCH70	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacillus stearothermophilus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacillus thermocatenuatus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacillus thermodenitrificans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus

TABLE 1

Geobacillus thermoglucosidasius	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacillus thermoleovorans	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Geobacillus
Geobacter bemidjensis	Bacteria	Proteobacteria	Deltaproteobacteria	Desulfuromonadales	Geobacteraceae	Geobacter
Gloeobacter violaceus	Bacteria	Cyanobacteria	Gloeobacteria	Gloeobacterales	unclassified	Gloeobacter
Gluconacetobacter azotocaptans	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter diazotrophicus	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter entanii	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter europaeus	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter hansenii	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter johanniae	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter oboediens	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gluconacetobacter xylinus	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Gluconacetobacter
Gordonia bronchialis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Gordoniaceae	Gordonia
Gordonia polyisoprenivorans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Gordoniaceae	Gordonia
Gordonia sp. KTR9	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Gordoniaceae	Gordonia
Gordonia sputi	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Gordoniaceae	Gordonia
Gordonia terrae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Gordoniaceae	Gordonia
Gordonibacter pamelaeeae	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Gordonibacter
Gracilibacter thermotolerans	Bacteria	Firmicutes	Clostridia	Clostridiales	Gracilibacteraceae	Gracilibacter
Gramella forsetii	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Gramella
Granulicatella adiacens	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella elegans	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella paradiacens	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella sp. M658/99/3	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella sp. oral clone ASC02	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella sp. oral clone ASCA05	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella sp. oral clone ASCB09	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Granulicatella sp. oral clone ASCG05	Bacteria	Firmicutes	Bacilli	Lactobacillales	Carnobacteriaceae	Granulicatella
Grimontia hollisae	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	unclassified
Haemartobacter sp. BC14248	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Haemartobacter
Haemophilus aegyptius	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus genomsp. P2 oral clone MB3_C24	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus genomsp. P3 oral clone MB3_C38	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus haemolyticus	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus parahaemolyticus	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus parainfluenzae	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus paraphrohaemolyticus	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus parasuis	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus somnus	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Histophilus
Haemophilus sp. 70334	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. HK445	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. oral clone ASCA07	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. oral clone ASCG06	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. oral clone BJ021	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. oral clone BJ095	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. oral clone JM053	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sp. oral taxon B51	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Haemophilus sputorum	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus
Hafnia alvei	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Hafnia
Halomonas elongata	Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	Halomonas
Halomonas johnsoniae	Bacteria	Proteobacteria	Gammaproteobacteria	Oceanospirillales	Halomonadaceae	Halomonas
Halorubrum lipolyticum	Archaea	Euryarchaeota	Halobacteria	Halobacteriales	Halobacteriaceae	Halorubrum
Helicobacter bilis	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Helicobacteraceae	Helicobacter
Helicobacter canadensis	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Helicobacteraceae	Helicobacter

TABLE 1

<i>Helicobacter cinaedi</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	<i>Helicobacter</i>
<i>Helicobacter pullorum</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	<i>Helicobacter</i>
<i>Helicobacter</i> sp. Nona	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	<i>Helicobacter</i>
<i>Helicobacter winthamensis</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteraceae	<i>Helicobacter</i>
<i>Helibacterium modesticaldum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Helibacteriaceae	<i>Helibacterium</i>
<i>Herbaspirillum seropedicae</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	<i>Herbaspirillum</i>
<i>Herbaspirillum</i> sp. JC206	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	<i>Herbaspirillum</i>
<i>Histophilus somni</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Histophilus</i>
<i>Holdemania filiformis</i>	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	<i>Holdemania</i>
<i>Hydrogenoanaerobacterium saccharovorans</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	<i>Hydrogenoanaerobacterium</i>
<i>Hyperthermus butylicus</i>	Archaea	Crenarchaeota	Thermoprotei	Desulfurococcales	Pyrodictiaceae	<i>Hyperthermus</i>
<i>Hyphomicrobium sulfonivorans</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	<i>Hyphomicrobium</i>
<i>Hyphomonas neptunium</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Hyphomonadaceae	<i>Hyphomonas</i>
<i>Ignatzschineria indica</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Ignatzschineria</i>
<i>Ignatzschineria</i> sp. NML 95-0260	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Ignatzschineria</i>
<i>Ignicoccus islandicus</i>	Archaea	Crenarchaeota	Thermoprotei	Desulfurococcales	Desulfurococcaceae	<i>Ignicoccus</i>
<i>Inquilinus limosus</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Rhodospirillaceae	<i>Inquilinus</i>
<i>Janibacter limosus</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Intrasporangiaceae	<i>Janibacter</i>
<i>Janibacter melonis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Intrasporangiaceae	<i>Janibacter</i>
<i>Janthinobacterium</i> sp. SY12	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteriaceae	<i>Janthinobacterium</i>
<i>Johnsonella ignava</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Johnsonella</i>
<i>Jonquetella anthropi</i>	Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	<i>Jonquetella</i>
<i>Kerstersia gylorum</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	unclassified
<i>Kingella denitrificans</i>	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	<i>Kingella</i>
<i>Kingella genomsp. P1 oral cone MB2_C20</i>	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	<i>Kingella</i>
<i>Kingella kingae</i>	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	<i>Kingella</i>
<i>Kingella oralis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	<i>Kingella</i>
<i>Kingella</i> sp. oral clone ID059	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	<i>Kingella</i>
<i>Klebsiella</i> sp. AS10	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. Co9935	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. enrichment culture clone SRC_DSD25	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. QBRC7	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SP-BA	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SRC_DSD1	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SRC_DSD11	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SRC_DSD12	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SRC_DSD15	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SRC_DSD2	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella</i> sp. SRC_DSD6	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Klebsiella varicola</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Klebsiella</i>
<i>Kluyvera ascorbata</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kluyvera</i>
<i>Kluyvera cryocrescens</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Kluyvera</i>
<i>Kocuria marina</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	<i>Kocuria</i>
<i>Kocuria palustris</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	<i>Kocuria</i>
<i>Kocuria thiozophila</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	<i>Kocuria</i>
<i>Kocuria rosea</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	<i>Kocuria</i>
<i>Kocuria varians</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	<i>Kocuria</i>
<i>Lachnobacterium bovis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Lachnobacterium</i>
<i>Lachnospira multipara</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Lachnospira</i>
<i>Lachnospira pectinoschiza</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Lachnospira</i>
<i>Lachnospiraceae bacterium</i> 1_1_57FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
<i>Lachnospiraceae bacterium</i> 1_4_56FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
<i>Lachnospiraceae bacterium</i> 2_1_46FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
<i>Lachnospiraceae bacterium</i> 2_1_58FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified

TABLE 1

Lachnospiraceae bacterium 3_1_57FAA_CT1	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium 4_1_37FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium 5_1_57FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium 5_1_63FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium 6_1_63FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium 8_1_57FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium 9_1_438FAA	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium A4	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium DJF VP30	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium RCM62	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium MSX33	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium oral taxon 107	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae bacterium oral taxon FJ5	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lachnospiraceae genomosp. C1	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Lactobacillus acidiphilus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus acidophilus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus alimentarius	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus amyloviticus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus amylovorus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus antri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus brevis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus buchneri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus casei	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus cateniformis	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Eggerthia
Lactobacillus coleohominis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus coryniformis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus crispatus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus curvatus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus delbrueckii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus dextrinicus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus farciminus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus fermentum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus gasseri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus gastricus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus genomosp. C1	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus genomosp. C2	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus helveticus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus hilgardii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus hominis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus iners	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus jensenii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus johnsonii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus kalixensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus kefirifaciens	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus kefirii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus kimchii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus leichmannii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus mucosae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus murinus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus nodensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus oeni	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus oris	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus parabrevis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus parabuchneri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus

TABLE 1

Lactobacillus paracasei	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus parakefirii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus pentosus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus perolens	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus plantarum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus pontis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus reuteri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus rhamnosus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus rugosae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus ruminis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sakei	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus salivarius	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus saniviri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus senioris	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. 66c	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. BT6	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0701	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0702	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0703	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0704	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0705	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0707	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0709	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0711	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0712	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0713	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0716	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0718	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. KLD5 1.0719	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. oral clone HT002	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. oral clone HT070	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus sp. oral taxon 052	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus tucetii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus ultunensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus vaginalis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus vini	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactobacillus vitulinus	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Kandleria
Lactobacillus zeae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	Lactobacillus
Lactococcus garvieae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Lactococcus
Lactococcus lactis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Lactococcus
Lactococcus raffinolactis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Lactococcus
Lactonifactor longoviformis	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Lactonifactor
Laribacter hongkongensis	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Laribacter
Lautropia mirabilis	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Lautropia
Lautropia sp. oral clone AP009	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Lautropia
Leminorella grinnontii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Leminorella
Leminorella richardii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Leminorella
Leptotrichia buccalis	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia genomosp. C1	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia goodiiellowii	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia hotstadii	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia shahii	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia sp. neutropenicPatient	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia sp. oral clone GT018	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia

TABLE 1

Leptotrichia sp. oral clone GT020	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia sp. oral clone ME012	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia sp. oral clone K040	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia sp. oral clone P2P8_51 P1	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leptotrichia sp. oral taxon 223	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Leptotrichia
Leuconostoc carnosum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc citreum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc gasicomitatum	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc infantae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc kimchii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc lactis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc mesenteroides	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Leuconostoc pseudomesenteroides	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Leuconostoc
Listeria innocua	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria
Listeria ivanovii	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria
Luteococcus sanguinis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Luteococcus
Lutispora thermophila	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Lutispora
Lysinibacillus fusiformis	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Lysinibacillus
Lysinibacillus sphaericus	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Lysinibacillus
Macrocococcus caseolyticus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Macrocococcus
Mannheimia haemolytica	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Mannheimia
Marvinbryantia formatexigens	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	unclassified
Massilia sp. CCUG 43427A	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	Massilia
Megamonas funiformis	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megamonas
Megamonas hypermegale	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megamonas
Megasphaera elsdenii	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megasphaera
Megasphaera genomosp. C1	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megasphaera
Megasphaera genomosp. type_1	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megasphaera
Megasphaera micronuciformis	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megasphaera
Megasphaera sp. BLPYG-07	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megasphaera
Megasphaera sp. UPH 199-6	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Megasphaera
Metallosphaera sedula	Archaea	Crenarchaeota	Thermoprotei	Sulfolobales	Sulfolobaceae	Metallosphaera
Methanobacterium formicicum	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobacterium
Methanobrevibacter acididurans	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter arboriphilus	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter curvatus	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter cuticularis	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter filiformis	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter gottschalkii	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter millerae	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter olleyae	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter oralis	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter ruminantium	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter smithii	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter thaueri	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter woesei	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanobrevibacter wolinii	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanobrevibacter
Methanosphaera stadtmanae	Archaea	Euryarchaeota	Methanobacteria	Methanobacteriales	Methanobacteriaceae	Methanosphaera
Methylobacterium extorquens	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylobacteriaceae	Methylobacterium
Methylobacterium podarium	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylobacteriaceae	Methylobacterium
Methylobacterium radiotolerans	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylobacteriaceae	Methylobacterium
Methylobacterium sp. Jsub	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylobacteriaceae	Methylobacterium
Methylobacterium sp. MM4	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Methylobacteriaceae	Methylobacterium
Methylocella silvestris	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	Methylocella

TABLE 1

Methylophilus sp. ECd5	Bacteria	Proteobacteria	Betaproteobacteria	Methylophilales	Methylophilaceae	Methylophilus
Microbacterium chocatatum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium flavescens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium gubbeenense	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium lacticum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium oleivorans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium oxydans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium paraoxydans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium phyllosphaerae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium schleiferi	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium sp. 768	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium sp. oral strain C24KA	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Microbacterium testaceum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Microbacterium
Micrococcus antarcticus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Micrococcus
Micrococcus luteus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Micrococcus
Micrococcus lylae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Micrococcus
Micrococcus sp. 185	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Micrococcus
Microcystis aeruginosa	Bacteria	Cyanobacteria	unclassified	Chroococcales	unclassified	Microcystis
Mitsuokella jalaludinii	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Mitsuokella
Mitsuokella mullacida	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Mitsuokella
Mitsuokella sp. oral taxon 521	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Mitsuokella
Mitsuokella sp. oral taxon G68	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Mitsuokella
Mobiluncus curtisi	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Mobiluncus
Mobiluncus mulieris	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Mobiluncus
Moellerella wisconsinensis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Moellerella
Mogibacterium diversum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII, Incertae Sedis	Mogibacterium
Mogibacterium neglectum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII, Incertae Sedis	Mogibacterium
Mogibacterium pumilum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII, Incertae Sedis	Mogibacterium
Mogibacterium tinidum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XIII, Incertae Sedis	Mogibacterium
Mollicutes bacterium pACH93	Bacteria	Tenericutes	Mollicutes	unclassified	unclassified	unclassified
Moorella thermoacetica	Bacteria	Firmicutes	Clostridia	Thermoanaerobacteriales	Thermoanaerobacteraceae	Moorella
Moraxella catarrhalis	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Moraxella
Moraxella lincolni	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Moraxella
Moraxella osloensis	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Moraxella
Moraxella sp. 16285	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Moraxella
Moraxella sp. GM2	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Moraxella
Morganella morganii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Morganella
Morganella sp. JB-T16	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Morganella
Morococcus cerebrosus	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Morococcus
Moryella indoligenes	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Moryella
Mycobacterium sp. 1761	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. 1776	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. 1781	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. 1791	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. 1797	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. AQ1GA4	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. 810-07.09.0206	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. GN-10546	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. GN-10827	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. GN-11124	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. GN-9188	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. GR-2007-210	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. HE5	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycobacterium sp. NLA001000736	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium

TABLE 1

Mycobacterium sp. W	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium
Mycoplasma agalactiae	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma amphoriforme	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma arthritis	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma bovoculi	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma faucium	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma fermentans	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma flocculare	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma genitalium	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma hominis	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma orale	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma ovipneumoniae	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma penetrans	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma pneumoniae	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma putrefaciens	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasma salivarium	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Mycoplasma
Mycoplasmataceae genomosp. P1 oral clone MB1_G23	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	unclassified
Myroides odoratitimus	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Myroides
Myroides sp. MY15	Bacteria	Bacteroidetes	Flavobacteria	Flavobacteriales	Flavobacteriaceae	Myroides
Neisseria bacilliformis	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria cinerea	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria elongata	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria flavescens	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria genomosp. P2 oral clone MB5_P15	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria lactamica	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria macacae	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria mucosa	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria pharyngis	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria polysaccharaea	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sicca	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. KEM232	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. oral clone AP132	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. oral clone JC012	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. oral strain B33KA	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. oral taxon 014	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. SMC-A9199	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria sp. TW10_1	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neisseria subflava	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria
Neorickettsia risticii	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Neorickettsia
Neorickettsia sennetsu	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Neorickettsia
Nocardia brasiliensis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Nocardia
Nocardia cyriacigeorgica	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Nocardia
Nocardia farcinica	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Nocardia
Nocardia puris	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Nocardia
Nocardia sp. 01-Je-025	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Nocardia
Nocardiosis dassonvillei	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiosisaceae	Nocardiosis
Novosphingobium aromaticivorans	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Novosphingobium
Oceanobacillus caeni	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Oceanobacillus
Oceanobacillus sp. Ndiop	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Oceanobacillus
Ochrobactrum anthropi	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	Ochrobactrum
Ochrobactrum intermedium	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	Ochrobactrum
Ochrobactrum pseudintermedium	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	Ochrobactrum
Odoribacter laneus	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Odoribacter
Odoribacter splanchnicus	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Odoribacter

TABLE 1

<i>Okadaella gastrococcus</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	<i>Okadaella</i>
<i>Okadaella urethralis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Okadaella</i>
<i>Olsenella genomsp. C1</i>	Bacteria	Actinobacteria	Actinobacteria	Burkholderiales	Actinogymnomonaceae	<i>Olsenella</i>
<i>Olsenella protuca</i>	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	<i>Olsenella</i>
<i>Olsenella sp. F0004</i>	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	<i>Olsenella</i>
<i>Olsenella sp. oral taxon 409</i>	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	<i>Olsenella</i>
<i>Olsenella uii</i>	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	<i>Olsenella</i>
<i>Opitulus terrae</i>	Bacteria	Verrucomicrobia	Opitutae	Opitutales	Opitutaceae	<i>Opitulus</i>
<i>Oribacterium sinus</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. ACB1</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. ACB7</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. CM12</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. OBR6C12</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. oral taxon 078</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. oral taxon 102</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Oribacterium sp. oral taxon 106</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	<i>Oribacterium</i>
<i>Ornithinibacillus bavaricus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Ornithinibacillus</i>
<i>Ornithinibacillus sp. 7-10A1A</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Ornithinibacillus</i>
<i>Oscillibacter sp. G2</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Oscillospiraceae	<i>Oscillibacter</i>
<i>Oscillibacter valericigenes</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Oscillospiraceae	<i>Oscillibacter</i>
<i>Oscillospira guillermoidis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Oscillospiraceae	<i>Oscillospira</i>
<i>Oxalobacter formigenes</i>	Bacteria	Proteobacteria	Clostridia	Clostridiales	Ruminococcaceae	<i>Oxalobacter</i>
<i>Paenibacillus barchinonensis</i>	Bacteria	Firmicutes	Betaproteobacteria	Burkholderiales	Oxalobacteraceae	<i>Paenibacillus</i>
<i>Paenibacillus beregoltzi</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus chibensis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus cookii</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus durus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus glucanolyticus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus lactis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus lautus</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus pabuli</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus polymyxa</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus popilliae</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. CIP 103.062</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. HGF5</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. HGF7</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. JC66</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. oral taxon F45</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. R-27413</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus sp. R-27422</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus thronensis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Paenibacillus thronensis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Paenibacillaceae	<i>Paenibacillus</i>
<i>Pantoea agglomerans</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea</i>
<i>Pantoea ananatis</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea</i>
<i>Pantoea breinerei</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea</i>
<i>Pantoea citrea</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Pantoea</i>
<i>Pantoea conspurcua</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Enterobacteriaceae	<i>Pantoea</i>
<i>Pantoea septica</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Enterobacteriaceae	<i>Pantoea</i>
<i>Papillibacter chimamwensis</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Ruminococcaceae	<i>Papillibacter</i>
<i>Parabacteroides distasonis</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Parabacteroidaceae	<i>Parabacteroides</i>
<i>Parabacteroides goldsteinii</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Parabacteroidaceae	<i>Parabacteroides</i>
<i>Parabacteroides gordonii</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Parabacteroidaceae	<i>Parabacteroides</i>
<i>Parabacteroides johnsonii</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Parabacteroidaceae	<i>Parabacteroides</i>

TABLE 1

<i>Parabacteroides merdae</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Parabacteroides</i>
<i>Parabacteroides</i> sp. DJ3	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Parabacteroides</i>
<i>Parabacteroides</i> sp. NS31-3	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Parabacteroides</i>
<i>Parachlamydia</i> sp. UWE25	Bacteria	Chlamydiae	Chlamydiae	Chlamydiales	Parachlamydiaceae	<i>Parachlamydia</i>
<i>Paracoccus denitrificans</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Paracoccus</i>
<i>Paracoccus marcusii</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	<i>Paracoccus</i>
<i>Paraprevotella clara</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Paraprevotella</i>
<i>Paraprevotella xylaniphila</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	<i>Paraprevotella</i>
<i>Parascardovia denticolens</i>	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	<i>Parascardovia</i>
<i>Parasutterella excrementihominis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	<i>Parasutterella</i>
<i>Parasutterella secunda</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	<i>Parasutterella</i>
<i>Parvimonas micra</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	unclassified
<i>Parvimonas</i> sp. oral taxon 110	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	unclassified
<i>Pasteurella bettyae</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella</i>
<i>Pasteurella dagmatis</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella</i>
<i>Pasteurella multocida</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	<i>Pasteurella</i>
<i>Pediococcus acidilactici</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	<i>Pediococcus</i>
<i>Pediococcus pentosaceus</i>	Bacteria	Firmicutes	Bacilli	Lactobacillales	Lactobacillaceae	<i>Pediococcus</i>
<i>Peptococcus niger</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	<i>Peptococcus</i>
<i>Peptococcus</i> sp. oral clone JM048	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	<i>Peptococcus</i>
<i>Peptococcus</i> sp. oral taxon 167	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptococcaceae	<i>Peptococcus</i>
<i>Peptoniphilus asaccharolyticus</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus duerdenii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus harei</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus indolicus</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus ivorii</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus lacrimalis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. gpac007	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. gpac018A	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. gpac077	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. gpac148	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. JC140	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. oral taxon 386	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptoniphilus</i> sp. oral taxon 836	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	<i>Peptoniphilus</i>
<i>Peptostreptococcaceae bacterium ph1</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	unclassified
<i>Peptostreptococcus anaerobius</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	<i>Peptostreptococcus</i>
<i>Peptostreptococcus micros</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI, Incertae Sedis	unclassified
<i>Peptostreptococcus</i> sp. 9succ1	Bacteria	Firmicutes	Clostridia	Clostridiales	Incertae Sedis XI	<i>Peptoniphilus</i>
<i>Peptostreptococcus</i> sp. oral clone AP24	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	<i>Peptostreptococcus</i>
<i>Peptostreptococcus</i> sp. oral clone FJ023	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	<i>Peptostreptococcus</i>
<i>Peptostreptococcus</i> sp. P4P_31_P3	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	<i>Peptostreptococcus</i>
<i>Peptostreptococcus stomatis</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae	<i>Peptostreptococcus</i>
<i>Phascolarctobacterium faecium</i>	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Acidaminococcaceae	<i>Phascolarctobacterium</i>
<i>Phascolarctobacterium</i> sp. YIT 12068	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Acidaminococcaceae	<i>Phascolarctobacterium</i>
<i>Phascolarctobacterium succinatutens</i>	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Acidaminococcaceae	<i>Phascolarctobacterium</i>
<i>Phenyllobacterium zucineum</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Caulobacteriales	Caulobacteraceae	<i>Phenyllobacterium</i>
<i>Photorhabdus asymbiotica</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Photorhabdus</i>
<i>Pigmentiphaga daeguensis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Pigmentiphaga</i>
<i>Planomicrobium koreense</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	<i>Planomicrobium</i>
<i>Plesiomonas shigelloides</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	<i>Plesiomonas</i>
<i>Porphyromonadaceae bacterium NML 050648</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	unclassified
<i>Porphyromonas asaccharolytica</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Porphyromonas</i>
<i>Porphyromonas endodontalis</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Porphyromonas</i>
<i>Porphyromonas gingivalis</i>	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	<i>Porphyromonas</i>

TABLE 1

Porphyromonas levi	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas macacae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas somerae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas sp. oral clone B8134	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas sp. oral clone F016	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas sp. oral clone P2P8_52 P1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas sp. oral clone P4GB_100 P2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas sp. UQD 301	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Porphyromonas
Porphyromonas uenonis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella albensis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella amnii	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella bergensis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella bivia	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella brevis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella buccae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella buccalis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella copri	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella corporis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella dentalis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella denticola	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella disiens	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella genomosp. C1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella genomosp. C2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella genomosp. P7 oral clone M82_P31	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella genomosp. P8 oral clone M83_P13	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella genomosp. P9 oral clone M87_G16	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella heparinolytica	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides
Prevotella histicola	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella intermedia	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella loeschii	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella maculosa	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella marshii	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella melaninogenica	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella micanis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella multiformis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella multisaccharivorax	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella nanceiensis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella nigrescens	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella oralis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella oris	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella outorum	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella pallens	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella ruminicola	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella salivae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. B1-42	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. CM38	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. ICM1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. ICM55	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. JCM 6330	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone AA020	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone ASCG10	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone ASCG12	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone AU069	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone CY006	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella

TABLE 1

Prevotella sp. oral clone DA058	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone FL019	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone FU048	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone FW035	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone GI030	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone GI032	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone GI059	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone GU027	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone HF050	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone ID019	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone IDR-CEC-0024	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone IDR-CEC-0032	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone IDR-CEC-0055	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone IK053	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone IK062	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral clone P4PB_83 P2	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 292	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 299	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 300	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 302	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Alioprevotella
Prevotella sp. oral taxon 310	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 317	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 472	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 781	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon 782	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon F68	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon G60	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon G70	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. oral taxon G71	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. SEQ053	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. SEQ065	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. SEQ072	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. SEQ116	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. SG12	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. sp24	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella sp. sp34	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella stercorea	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella tannerae	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Alioprevotella
Prevotella timonensis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotella veoralis	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	Prevotella
Prevotellaceae bacterium P4P_G2 P1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Prevotellaceae	unclassified
Prochlorococcus marinus	Bacteria	Cyanobacteria	unclassified	Prochlorales	Prochlorococcaceae	Prochlorococcus
Propionibacteriaceae bacterium NML 02-0265	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	unclassified
Propionibacterium acidipropionici	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium acnes	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium avidum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium freudenreichii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium granulosum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium jensenii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium propionicum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium sp. 434-HC2	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium sp. H456	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium sp. LG	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium sp. oral taxon 192	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium

TABLE 1

Propionibacterium sp. S555a	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Propionibacterium thoenii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Propionibacterium
Proteus mirabilis	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Proteus
Proteus penneri	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Proteus
Proteus sp. HS7514	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Proteus
Proteus vulgaris	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Proteus
Providencia alcalifaciens	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Providencia
Providencia rettgeri	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Providencia
Providencia rustigianii	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Providencia
Providencia stuartii	Bacteria	Proteobacteria	Enterobacteriales	Enterobacteriales	Enterobacteriaceae	Providencia
Pseudoclavibacter sp. Timone	Bacteria	Actinobacteria	Actinomycetales	Actinomycetales	Microbacteriaceae	Pseudoclavibacter
Pseudoflavonifractor capillosus	Bacteria	Firmicutes	Clostridia	Clostridiales	unclassified	Pseudoflavonifractor
Pseudomonas aeruginosa	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas fluorescens	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas gessardii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas mendocina	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas montellii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas poae	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas pseudoalcaligenes	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas putida	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas sp. 2_3_26	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas sp. G1229	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas sp. NP522b	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas stutzeri	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas tolaasii	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudomonas viridiflava	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	Pseudomonas
Pseudoramibacter alactolyticus	Bacteria	Firmicutes	Clostridia	Clostridiales	Eubacteriaceae	Pseudoramibacter
Psychrobacter arcticus	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Psychrobacter cibarius	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Psychrobacter cryohalophilus	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Psychrobacter faecalis	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Psychrobacter nivimaris	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Psychrobacter pulmonis	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Psychrobacter sp. 13983	Bacteria	Proteobacteria	Gammaproteobacteria	Pseudomonadales	Moraxellaceae	Psychrobacter
Pyramidobacter piscicolen	Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	Pyramidobacter
Ralstonia pickettii	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Ralstonia
Ralstonia sp. S_7_47FAA	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	Ralstonia
Raoultella ornithinolytica	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Raoultella
Raoultella planticola	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Raoultella
Raoultella terrigena	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Raoultella
Rhodobacter sp. oral taxon C30	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Rhodobacter
Rhodobacter sphaeroides	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodobacterales	Rhodobacteraceae	Rhodobacter
Rhodococcus corynebacterioides	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Rhodococcus
Rhodococcus equi	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Rhodococcus
Rhodococcus erythropolis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Rhodococcus
Rhodococcus fascians	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiaceae	Rhodococcus
Rhodopseudomonas palustris	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Bradyrhizobiaceae	Rhodopseudomonas
Robinsoniella peoriensis	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Robinsoniella
Roseburia cecicola	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseburia faecalis	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseburia faecis	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseburia hominis	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseburia intestinalis	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseburia inulinivorans	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia

TABLE 1

Roseburia sp. 115E37	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseburia sp. 115E38	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Roseburia
Roseiflexus castenholzii	Bacteria	Chloroflexi	Chloroflexi	Chloroflexales	Chloroflexaceae	Roseiflexus
Roseomonas cervicalis	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas
Roseomonas mucosa	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas
Roseomonas sp. NML94-0193	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas
Roseomonas sp. NML97-0121	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas
Roseomonas sp. NML98-0009	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas
Roseomonas sp. NML98-0157	Bacteria	Proteobacteria	Alphaproteobacteria	Rhodospirillales	Acetobacteraceae	Roseomonas
Rothia aerea	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Rothia
Rothia dentocariosa	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Rothia
Rothia mucilaginosa	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Rothia
Rothia nasimurium	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Rothia
Rothia sp. oral taxon 188	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Micrococcaceae	Rothia
Ruminobacter amylophilus	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Succinivibrionaceae	Ruminobacter
Ruminococcaceae bacterium D16	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	unclassified
Ruminococcus albus	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus bromii	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus callidus	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus champanellensis	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus flavefaciens	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus gnavus	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Ruminococcus hanseii	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Ruminococcus lactaris	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus obeum	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Ruminococcus sp. 18P13	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus sp. 5_1_39BF4A	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus sp. 9SE51	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus sp. ID8	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus sp. K-1	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Ruminococcus
Ruminococcus torques	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Blautia
Saccharomonospora viridis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Pseudonocardiaceae	Saccharomonospora
Sarcina ventriculi	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Sarcina
Scardovia inopinata	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Scardovia
Scardovia wiggsiae	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	Scardovia
Segniliparus rotundus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Segniliparaceae	Segniliparus
Segniliparus rugosus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Segniliparaceae	Segniliparus
Selenomonas artemidis	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas diana	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas flueggei	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas genomosp. C1	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas genomosp. C2	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas genomosp. P5	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas genomosp. P6 oral clone MB3_C41	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas genomosp. P7 oral clone MB5_C08	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas genomosp. P8 oral clone MB5_P06	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas infelix	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas noxia	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas ruminantium	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. FOBR C9	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone FT050	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone GI064	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone GT010	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone HU051	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas

TABLE 1

Selenomonas sp. oral clone IK004	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone IQ048	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone JI021	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone JS031	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone QH4A	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral clone PZPA_80 P4	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral taxon 137	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sp. oral taxon 149	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Selenomonas sputigena	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Selenomonas
Serratia fonticola	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia
Serratia liquefaciens	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia
Serratia marcescens	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia
Serratia odorifera	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia
Serratia proteamaculans	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Serratia
Shewanella putrefaciens	Bacteria	Proteobacteria	Gammaproteobacteria	Alteromonadales	Shewanellaceae	Shewanella
Shuttleworthia satelles	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Shuttleworthia
Shuttleworthia sp. MSX8B	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Shuttleworthia
Shuttleworthia sp. oral taxon G69	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Shuttleworthia
Simonsiella muelleri	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Simonsiella
Slackia equifaciens	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Slackia exigua	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Slackia faecialis	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Slackia heliotrinireducens	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Slackia isoflavoniconvertens	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Slackia piliformis	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Slackia sp. NATTS	Bacteria	Actinobacteria	Actinobacteria	Coriobacteriales	Coriobacteriaceae	Slackia
Solobacterium moorei	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Solobacterium
Sphingobacterium faecium	Bacteria	Bacteroidetes	Sphingobacteriia	Sphingobacteriales	Sphingobacteriaceae	Sphingobacterium
Sphingobacterium mizutaii	Bacteria	Bacteroidetes	Sphingobacteriia	Sphingobacteriales	Sphingobacteriaceae	Sphingobacterium
Sphingobacterium multivorum	Bacteria	Bacteroidetes	Sphingobacteriia	Sphingobacteriales	Sphingobacteriaceae	Sphingobacterium
Sphingobacterium spiritivorum	Bacteria	Bacteroidetes	Sphingobacteriia	Sphingobacteriales	Sphingobacteriaceae	Sphingobacterium
Sphingomonas echinoides	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas
Sphingomonas sp. oral clone FI012	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas
Sphingomonas sp. oral clone FZ016	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas
Sphingomonas sp. oral taxon A09	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas
Sphingomonas sp. oral taxon F71	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingomonas
Sphingopyxis alaskensis	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Sphingopyxis
Spiroplasma insolitum	Bacteria	Tenericutes	Mollicutes	Entomoplasmatales	Spiroplasmataceae	Spiroplasma
Sporobacter termitidis	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Sporobacter
Sporolactobacillus inulinus	Bacteria	Firmicutes	Bacilli	Bacillales	Sporolactobacillaceae	Sporolactobacillus
Sporolactobacillus nakayamae	Bacteria	Firmicutes	Bacilli	Bacillales	Sporolactobacillaceae	Sporolactobacillus
Sporosarcina newyorkensis	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Sporosarcina
Sporosarcina sp. 2681	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Sporosarcina
Staphylococcaceae bacterium NML 92-0017	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	unclassified
Staphylococcus aureus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus auricularis	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus capitis	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus caprae	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus carnosus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus cohnii	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus condimenti	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus epidermidis	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus equorum	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus fleurettii	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus

TABLE 1

Staphylococcus haemolyticus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus hominis	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus lugdunensis	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus pasteuri	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus pseudintermedius	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus saccharolyticus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus saprophyticus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus sciuri	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus sp. clone bottae7	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus sp. H292	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus sp. H780	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus succinus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus vitulinus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus warneri	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Staphylococcus xylosus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus
Stenotrophomonas maltophilia	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Stenotrophomonas
Stenotrophomonas sp. FG-6	Bacteria	Proteobacteria	Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	Stenotrophomonas
Streptobacillus moniliformis	Bacteria	Fusobacteria	Fusobacteriia	Fusobacteriales	Leptotrichiaceae	Streptobacillus
Streptococcus agalactiae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus atactolyticus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus anginosus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus australis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus bovis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus canis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus constellatus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus cristatus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus downei	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus dysgalactiae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus equi	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus equinus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus gallolyticus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C1	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C2	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C3	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C4	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C5	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C6	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C7	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus genomosp. C8	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus gordonii	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus infantarius	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus infantis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus intermedius	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus lutetiensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus massiliensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus milleri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus mitis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus mutans	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus oligofermentans	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus oralis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus parasanguinis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus pasteurianus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus peroris	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus pneumoniae	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus

5

[illegible]

TABLE 1

Streptococcus sp. oral clone P4PA_13 P3	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus sp. oral clone P4PA_30 P4	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus sp. oral taxon 071	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus sp. oral taxon G59	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus sp. oral taxon G62	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus sp. oral taxon G63	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus sp. SHV515	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus suis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus thermophilus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus uberis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus urinalis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus vestibularis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptococcus viridans	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus
Streptomyces albus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces griseus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces sp. 1 AIP-2009	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces sp. SD 511	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces sp. SD 524	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces sp. SD 528	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces sp. SD 534	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Streptomyces thermoviolaceus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Streptomycetaceae	Streptomyces
Subdoligranulum variabile	Bacteria	Firmicutes	Clostridia	Clostridiales	Ruminococcaceae	Subdoligranulum
Succinatimonas hippei	Bacteria	Proteobacteria	Gammaproteobacteria	Aeromonadales	Succinivibrionaceae	Succinatimonas
Sutterella morbitrenis	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	Sutterella
Sutterella parvicutra	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	Sutterella
Sutterella sanguinis	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	Sutterella
Sutterella sp. YIT 12072	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	Sutterella
Sutterella stercoricanis	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	Sutterella
Sutterella wadsworthensis	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Sutterellaceae	Sutterella
Synergistes genomosp. C1	Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	Synergistes
Synergistes sp. RMA 14551	Bacteria	Synergistetes	Synergistia	Synergistales	Synergistaceae	Synergistes
Synergistetes bacterium ADV897	Bacteria	Synergistetes	unclassified	unclassified	unclassified	unclassified
Synergistetes bacterium LBVCM1157	Bacteria	Synergistetes	unclassified	unclassified	unclassified	unclassified
Synergistetes bacterium oral clone 03 S 005	Bacteria	Synergistetes	unclassified	unclassified	unclassified	unclassified
Synergistetes bacterium oral taxon 362	Bacteria	Synergistetes	unclassified	unclassified	unclassified	unclassified
Synergistetes bacterium oral taxon 048	Bacteria	Synergistetes	unclassified	unclassified	unclassified	unclassified
Syntrophococcus sucromutans	Bacteria	Firmicutes	Clostridia	Clostridiales	Lachnospiraceae	Syntrophococcus
Syntrophomonadaceae genomosp. P1	Bacteria	Firmicutes	Clostridia	Clostridiales	Syntrophomonadaceae	unclassified
Tannerella forsythia	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Tannerella
Tannerella sp. 6_1_58FAA_CT1	Bacteria	Bacteroidetes	Bacteroidia	Bacteroidales	Porphyromonadaceae	Tannerella
Tatlockia micdadei	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Tatlockia
Tatumella plysios	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Tatumella
Tessaracoccus sp. oral taxon F04	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Propionibacteriaceae	Tessaracoccus
Tetragenococcus halophilus	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Tetragenococcus
Tetragenococcus koreensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Tetragenococcus
Thermoanaerobacter pseudethanolicus	Bacteria	Firmicutes	Clostridia	Thermoanaerobacterales	Thermoanaerobacteraceae	Thermoanaerobacter
Thermobifida fusca	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Nocardiopsaceae	Thermobifida
Thermofilum pendens	Archaea	Crenarchaeota	Thermoprotei	Thermoproteales	Thermofilaceae	Thermofilum
Thermus aquaticus	Bacteria	Deinococcus-Thermus	Deinococci	Thermales	Thermaceae	Thermus
Tissierella praeacuta	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiales Family XI. Incertae Sedis	Tissierella
Trabulsella guianensis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Trabulsella
Treponema genomosp. P1	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema genomosp. P4 oral clone MB2_G19	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema genomosp. P5 oral clone MB3_P23	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema

TABLE 1

Treponema genomsp. P6 oral clone MB4_G11	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema phagedenis	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. 6H:D15A-4	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. clone DDKL-4	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral clone JU025	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral clone JU031	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral clone P2PB_53 P3	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z28	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z30	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z31	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z32	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z35	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z39	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z47	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z50	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z51	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z54	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z65	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z70	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z71	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z08	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z18	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. oral taxon Z85	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema
Treponema sp. ovine footrot	Bacteria	Spirochaetes	Spirochaetes	Spirochaetales	Spirochaetaceae	Treponema
Tropheryma whipplei	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	unclassified	Tropheryma
Trueperella pyogenes	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Trueperella
Tsukamurella paurometabola	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Actinomycetaceae	Tsukamurella
Tsukamurella tyrosinosolvens	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Tsukamurellaceae	Tsukamurella
Turicibacter sanguinis	Bacteria	Firmicutes	Erysipelotrichi	Erysipelotrichales	Erysipelotrichaceae	Turicibacter
Ureaplasma parvum	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Ureaplasma
Ureaplasma urealyticum	Bacteria	Tenericutes	Mollicutes	Mycoplasmatales	Mycoplasmataceae	Ureaplasma
Ureibacillus composti	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Ureibacillus
Ureibacillus suwonensis	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Ureibacillus
Ureibacillus terrenus	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Ureibacillus
Ureibacillus thermophilus	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Ureibacillus
Ureibacillus thermosphaericus	Bacteria	Firmicutes	Bacilli	Bacillales	Planococcaceae	Ureibacillus
Vagococcus fluvialis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Enterococcaceae	Vagococcus
Veillonella atypica	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella dispar	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella genomsp. P1 oral clone M85_P17	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella montpellierensis	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella parvula	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. 3_1_44	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. 6_1_27	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. ACP1	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. AS16	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. B532b	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. iCM51a	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. MSA12	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. NVG 100cf	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. OK11	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. oral clone ASCA08	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. oral clone ASCB03	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella

TABLE 1

Veillonella sp. oral clone ASCG01	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. oral clone ASCG02	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. oral clone OH1A	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonella sp. oral taxon 158	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	Veillonella
Veillonellaceae bacterium oral taxon 131	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	unclassified
Veillonellaceae bacterium oral taxon 155	Bacteria	Firmicutes	Negativicutes	Selenomonadales	Veillonellaceae	unclassified
Victivallaceae bacterium NML 080035	Bacteria	Lentisphaerae	unclassified	unclassified	Victivallaceae	unclassified
Victivallis vadensis	Bacteria	Lentisphaerae	unclassified	unclassified	Victivallaceae	Victivallis
Virgibacillus proomii	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	Virgibacillus
Weissella beninensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella cibaria	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella confusa	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella hellenica	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella kandleri	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella koreensis	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella paramesenteroides	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Weissella sp. KLD5 7.0701	Bacteria	Firmicutes	Bacilli	Lactobacillales	Leuconostocaceae	Weissella
Wolinella succinogenes	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Helicobacteraceae	Wolinella
Xanthomonadaceae bacterium NML 03-0222	Bacteria	Proteobacteria	Gammaaproteobacteria	Xanthomonadales	Xanthomonadaceae	unclassified
Xanthomonas campestris	Bacteria	Proteobacteria	Gammaaproteobacteria	Xanthomonadales	Xanthomonadaceae	Xanthomonas
Xanthomonas sp. kmd_489	Bacteria	Proteobacteria	Gammaaproteobacteria	Xanthomonadales	Xanthomonadaceae	Xanthomonas
Xenophilus aerolatus	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Comamonadaceae	Xenophilus
Yokenella regensburgeri	Bacteria	Proteobacteria	Gammaaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yokenella
Zimmermannella bifida	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Microbacteriaceae	Pseudoclavibacter
Zymomonas mobilis	Bacteria	Proteobacteria	Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	Zymomonas

Table 2. Specific binary combinations of OTUs. Individual pairings are differentiated by "|" and OTUs within a combination are differentiated by ",".

Abiotrophia defectiva, Abiotrophia defectiva|Abiotrophia defectiva, Acidaminococcus fermentans|Abiotrophia defectiva, Acinetobacter baumannii|Abiotrophia defectiva, Acinetobacter johnsonii|Abiotrophia defectiva, Acinetobacter lwoffii|Abiotrophia defectiva, Acinetobacter radioresistens|Abiotrophia defectiva, Actinomyces odontolyticus|Abiotrophia defectiva, Actinomyces oris|Abiotrophia defectiva, Actinomyces viscosus|Abiotrophia defectiva, Aerococcus viridans|Abiotrophia defectiva, Aggregatibacter aphrophilus|Abiotrophia defectiva, Aggregatibacter segnis|Abiotrophia defectiva, Akkermansia muciniphila|Abiotrophia defectiva, Altipates putredinis|Abiotrophia defectiva, Altipates shahii|Abiotrophia defectiva, Anaerococcus hydrogenalis|Abiotrophia defectiva, Anaerococcus lactolyticus|Abiotrophia defectiva, Anaerococcus vaginalis|Abiotrophia defectiva, Anaerostipes caccae|Abiotrophia defectiva, Anaerotruncus ciliolominis|Abiotrophia defectiva, Atopobium parvulum|Abiotrophia defectiva, Atopobium rimae|Abiotrophia defectiva, Atopobium vaginae|Abiotrophia defectiva, Bacteroides caccae|Abiotrophia defectiva, Bacteroides cellulosilyticus|Abiotrophia defectiva, Bacteroides coprocola|Abiotrophia defectiva, Bacteroides coprophilus|Abiotrophia defectiva, Bacteroides dorei|Abiotrophia defectiva, Bacteroides eggerthii|Abiotrophia defectiva, Bacteroides finegoldii|Abiotrophia defectiva, Bacteroides fragilis|Abiotrophia defectiva, Bacteroides helgogens|Abiotrophia defectiva, Bacteroides intestinalis|Abiotrophia defectiva, Bacteroides ovatus|Abiotrophia defectiva, Bacteroides pectinophilus|Abiotrophia defectiva, Bacteroides plebeius|Abiotrophia defectiva, Bacteroides salanitronis|Abiotrophia defectiva, Bacteroides sp. 1_1_6|Abiotrophia defectiva, Bacteroides sp. 3_1_23|Abiotrophia defectiva, Bacteroides stercoris|Abiotrophia defectiva, Bacteroides thetaiotaomicron|Abiotrophia defectiva, Bacteroides uniformis|Abiotrophia defectiva, Bacteroides vulgatus|Abiotrophia defectiva, Bacteroides xylanisolvens|Abiotrophia defectiva, Bifidobacterium adolescentis|Abiotrophia defectiva, Bifidobacterium angulatum|Abiotrophia defectiva, Bifidobacterium animalis|Abiotrophia defectiva, Bifidobacterium bifidum|Abiotrophia defectiva, Bifidobacterium breve|Abiotrophia defectiva, Bifidobacterium catenulatum|Abiotrophia defectiva, Bifidobacterium dentium|Abiotrophia defectiva, Bifidobacterium infantis|Abiotrophia defectiva, Bifidobacterium longum|Abiotrophia defectiva, Bifidobacterium pseudocatenulatum|Abiotrophia defectiva, Bifidobacterium wadsworthii|Abiotrophia defectiva, Blautia hansenii|Abiotrophia defectiva, Blautia hydrogenotrophica|Abiotrophia defectiva, Blautia producta|Abiotrophia defectiva, Blautia schinkii|Abiotrophia defectiva, Brevibacterium linens|Abiotrophia defectiva, Brucella ceti|Abiotrophia defectiva, Brucella suis|Abiotrophia defectiva, Bulliedia extracta|Abiotrophia defectiva, Butyrivibrio crossotus|Abiotrophia defectiva, Campylobacter concisus|Abiotrophia defectiva, Campylobacter curvus|Abiotrophia defectiva, Campylobacter gracilis|Abiotrophia defectiva, Campylobacter hominis|Abiotrophia defectiva, Capnocytophaga ochracea|Abiotrophia defectiva, Cardiobacterium hominis|Abiotrophia defectiva, Catenibacterium mitsuokai|Abiotrophia defectiva, Catonella morbi|Abiotrophia defectiva, Citrobacter koseri|Abiotrophia defectiva, Clostridium asparagiforme|Abiotrophia defectiva, Clostridium bartlettii|Abiotrophia defectiva, Clostridium botulinum|Abiotrophia defectiva, Clostridium butyricum|Abiotrophia defectiva, Clostridium difficile|Abiotrophia defectiva, Clostridium disporicum|Abiotrophia defectiva, Clostridium hathewayi|Abiotrophia defectiva, Clostridium hylemonae|Abiotrophia defectiva, Clostridium innocuum|Abiotrophia defectiva, Clostridium leptum|Abiotrophia defectiva, Clostridium mayombeii|Abiotrophia defectiva, Clostridium methylpentosum|Abiotrophia defectiva, Clostridium nexile|Abiotrophia defectiva, Clostridium orbiscindens|Abiotrophia defectiva, Clostridium perfringens|Abiotrophia defectiva, Clostridium saccharolyticum|Abiotrophia defectiva, Clostridium scindens|Abiotrophia defectiva, Clostridium symbiosum|Abiotrophia defectiva, Clostridium tertium|Abiotrophia defectiva, Collinsella aerofaciens|Abiotrophia defectiva, Collinsella intestinalis|Abiotrophia defectiva, Collinsella stercoris|Abiotrophia defectiva, Coprobacillus sp. D7|Abiotrophia defectiva, Coprococcus catus|Abiotrophia defectiva, Coprococcus comes|Abiotrophia defectiva, Coprococcus eutactus|Abiotrophia defectiva, Corynebacterium aurimucosum|Abiotrophia defectiva, Corynebacterium matruchotii|Abiotrophia defectiva, Cryptobacterium curtum|Abiotrophia defectiva, Desulfovibrio desulfuricans|Abiotrophia defectiva, Desulfovibrio piger|Abiotrophia defectiva, Dialister invisus|Abiotrophia defectiva, Dialister microaerophilus|Abiotrophia defectiva, Dorea formicigenerans|Abiotrophia defectiva, Dorea longicatena|Abiotrophia defectiva, Eggerthella lenta|Abiotrophia defectiva, Eikenella corrodens|Abiotrophia defectiva, Enterobacter cancerogenus|Abiotrophia defectiva, Enterobacter cloacae|Abiotrophia defectiva, Enterococcus faecalis|Abiotrophia defectiva, Enterococcus faecium|Abiotrophia defectiva, Enterococcus gallinarum|Abiotrophia defectiva, Erysipelotrichaceae bacterium 3_1_53|Abiotrophia defectiva, Escherichia coli|Abiotrophia defectiva, Escherichia fergusonii|Abiotrophia defectiva, Ethanoligenens harbinense|Abiotrophia defectiva, Eubacterium cellulosolvens|Abiotrophia defectiva, Eubacterium eligens|Abiotrophia defectiva, Eubacterium hallii|Abiotrophia defectiva, Eubacterium limosum|Abiotrophia defectiva, Eubacterium rectale|Abiotrophia defectiva, Eubacterium siraeum|Abiotrophia defectiva, Eubacterium ventriosum|Abiotrophia defectiva, Faecalibacterium prausnitzii|Abiotrophia defectiva, Finegoldia magna|Abiotrophia defectiva, Fusobacterium gonidiformans|Abiotrophia defectiva, Fusobacterium mortiferum|Abiotrophia defectiva, Fusobacterium nucleatum|Abiotrophia defectiva, Fusobacterium varium|Abiotrophia defectiva, Gardnerella vaginalis|Abiotrophia defectiva, Gemella haemolyans|Abiotrophia defectiva, Gemella morbillorum|Abiotrophia defectiva, Gordonibacter pamelaiae|Abiotrophia defectiva, Granulicatella adiacens|Abiotrophia defectiva, Granulicatella elegans|Abiotrophia defectiva, Haemophilus influenzae|Abiotrophia defectiva, Haemophilus parainfluenzae|Abiotrophia defectiva, Helicobacter pullorum|Abiotrophia defectiva, Helicobacter pylori|Abiotrophia defectiva, Holdemania filiformis|Abiotrophia defectiva, Kingella oralis|Abiotrophia defectiva, Klebsiella pneumoniae|Abiotrophia defectiva, Klebsiella varicola|Abiotrophia defectiva, Lachnospiraceae bacterium 5_1_57FAA|Abiotrophia defectiva, Lactobacillus acidophilus|Abiotrophia defectiva, Lactobacillus amylovorus|Abiotrophia defectiva, Lactobacillus brevis|Abiotrophia defectiva, Lactobacillus casei|Abiotrophia defectiva, Lactobacillus crispatus|Abiotrophia defectiva, Lactobacillus delbrueckii|Abiotrophia defectiva, Lactobacillus fermentum|Abiotrophia defectiva, Lactobacillus gasseri|Abiotrophia defectiva, Lactobacillus iners|Abiotrophia defectiva, Lactobacillus jensenii|Abiotrophia defectiva, Lactobacillus johnsonii|Abiotrophia defectiva, Lactobacillus paracasei|Abiotrophia defectiva, Lactobacillus plantarum|Abiotrophia defectiva, Lactobacillus reuteri|Abiotrophia defectiva, Lactobacillus rhamnosus|Abiotrophia defectiva, Lactobacillus ruminis|Abiotrophia defectiva, Lactobacillus sakei|Abiotrophia defectiva, Lactobacillus salivarius|Abiotrophia defectiva, Lactococcus lactis|Abiotrophia defectiva, Lautropia mirabilis|Abiotrophia defectiva, Leuconostoc citreum|Abiotrophia defectiva, Leuconostoc gasiconitum|Abiotrophia defectiva, Leuconostoc mesenteroides|Abiotrophia defectiva, Listeria monocytogenes|Abiotrophia defectiva, Marvinbryantia formatexigens|Abiotrophia defectiva, Megamonas hypernegale|Abiotrophia defectiva, Megaphaera microniformis|Abiotrophia defectiva, Methanobrevibacter smithii|Abiotrophia defectiva, Methanospaera stadtmanae|Abiotrophia defectiva, Methylobacterium radiotolerans|Abiotrophia defectiva, Mitsuokella multicauda|Abiotrophia defectiva, Mobiluncus curtisii|Abiotrophia defectiva, Mycoplasma hominis|Abiotrophia defectiva, Neisseria mucosa|Abiotrophia defectiva, Odoribacter splanchnicus|Abiotrophia defectiva, Olsenella uli|Abiotrophia defectiva, Oribacterium sinus|Abiotrophia defectiva, Oxalobacter formigenes|Abiotrophia defectiva, Parabacteroides distasonis|Abiotrophia defectiva, Parabacteroides johnsonii|Abiotrophia defectiva, Parabacteroides merdae|Abiotrophia defectiva, Parvimonas micra|Abiotrophia defectiva, Pediococcus acidilactici|Abiotrophia defectiva, Pediococcus pentosaceus|Abiotrophia defectiva, Peptoniphilus duerdenii|Abiotrophia defectiva, Peptoniphilus harei|Abiotrophia defectiva, Peptoniphilus lacrimalis|Abiotrophia defectiva, Peptostreptococcus anaerobius|Abiotrophia defectiva, Peptostreptococcus stomatis|Abiotrophia defectiva, Porphyromonas asaccharolytica|Abiotrophia defectiva, Porphyromonas uenonis|Abiotrophia defectiva, Prevotella amnii|Abiotrophia defectiva, Prevotella bergensis|Abiotrophia defectiva, Prevotella bivia|Abiotrophia defectiva, Prevotella buccae|Abiotrophia defectiva, Prevotella buccalis|Abiotrophia defectiva, Prevotella copri|Abiotrophia defectiva, Prevotella disiens|Abiotrophia defectiva, Prevotella melaninogenica|Abiotrophia defectiva, Prevotella multiformis|Abiotrophia defectiva, Prevotella oralis|Abiotrophia defectiva, Prevotella oris|Abiotrophia defectiva, Prevotella salivae|Abiotrophia defectiva, Prevotella timonensis|Abiotrophia defectiva, Propionibacterium acnes|Abiotrophia defectiva, Propionibacterium freudenreichii|Abiotrophia defectiva, Proteus mirabilis|Abiotrophia defectiva, Proteus penneri|Abiotrophia defectiva, Pseudoflavonifractor capillosus|Abiotrophia defectiva, Pseudomonas aeruginosa|Abiotrophia defectiva, Pseudomonas fluorescens|Abiotrophia defectiva, Pseudomonas putida|Abiotrophia defectiva, Pseudorubrobacter alactolyticus|Abiotrophia defectiva, Pyramidobacter piscicola|Abiotrophia defectiva, Rhodopseudomonas palustris|Abiotrophia defectiva, Roseburia intestinalis|Abiotrophia defectiva, Roseburia inulinivorans|Abiotrophia defectiva, Rothia dentocariosa|Abiotrophia defectiva, Rothia mucilaginosa|Abiotrophia defectiva, Ruminococcus albus|Abiotrophia defectiva, Ruminococcus bromii|Abiotrophia defectiva, Ruminococcus gnavus|Abiotrophia defectiva, Ruminococcus lactaris|Abiotrophia defectiva, Ruminococcus obeum|Abiotrophia defectiva, Ruminococcus torques|Abiotrophia defectiva, Selenomonas spuitgensii|Abiotrophia defectiva, Shigella boydii|Abiotrophia defectiva, Shigella dysenteriae|Abiotrophia defectiva, Shigella sonnei|Abiotrophia defectiva, Slackia exigua|Abiotrophia defectiva, Solobacterium moorei|Abiotrophia defectiva, Staphylococcus aureus|Abiotrophia defectiva, Staphylococcus epidermidis|Abiotrophia defectiva, Staphylococcus hominis|Abiotrophia defectiva, Staphylococcus saprophyticus|Abiotrophia defectiva, Staphylococcus warneri|Abiotrophia defectiva, Streptococcus agalactiae|Abiotrophia defectiva, Streptococcus anginosus|Abiotrophia defectiva, Streptococcus australis|Abiotrophia defectiva, Streptococcus bovis|Abiotrophia defectiva, Streptococcus cristatus|Abiotrophia defectiva, Streptococcus dysgalactiae|Abiotrophia defectiva, Streptococcus equinus|Abiotrophia defectiva, Streptococcus gordonii|Abiotrophia defectiva, Streptococcus infantarius|Abiotrophia defectiva, Streptococcus infantilis|Abiotrophia defectiva, Streptococcus mitis|Abiotrophia defectiva, Streptococcus mutans|Abiotrophia defectiva, Streptococcus oralis|Abiotrophia defectiva, Streptococcus parasanguinis|Abiotrophia defectiva, Streptococcus peroris|Abiotrophia defectiva, Streptococcus pneumoniae|Abiotrophia defectiva, Streptococcus salivarius|Abiotrophia defectiva, Streptococcus sanguinis|Abiotrophia defectiva, Streptococcus thermophilus|Abiotrophia defectiva, Streptococcus vestibularis|Abiotrophia defectiva, Subdoligranulum variable|Abiotrophia defectiva, Succinomonas hippelae|Abiotrophia defectiva, Sutterella wadsworthensis|Abiotrophia defectiva, Tropheryma whipplei|Abiotrophia defectiva, Veillonella atypica|Abiotrophia defectiva, Veillonella dispar|Abiotrophia defectiva, Veillonella parvula|Abiotrophia defectiva, Victivallis vadensis|Acidaminococcus fermentans, Acidaminococcus fermentans|Acidaminococcus fermentans, Acinetobacter baumannii|Acidaminococcus fermentans, Acinetobacter johnsonii|Acidaminococcus fermentans, Acinetobacter lwoffii|Acidaminococcus fermentans, Acinetobacter radioresistens|Acidaminococcus fermentans, Actinomyces odontolyticus|Acidaminococcus fermentans, Actinomyces oris|Acidaminococcus fermentans, Actinomyces viscosus|Acidaminococcus fermentans, Aerococcus viridans|Acidaminococcus fermentans, Aggregatibacter aphrophilus|Acidaminococcus fermentans, Aggregatibacter segnis|Acidaminococcus fermentans, Akkermansia muciniphila|Acidaminococcus fermentans, Altipates putredinis|Acidaminococcus fermentans, Altipates shahii|Acidaminococcus fermentans, Anaerococcus hydrogenalis|Acidaminococcus fermentans, Anaerococcus lactolyticus|Acidaminococcus fermentans, Anaerococcus vaginalis|Acidaminococcus fermentans, Anaerostipes caccae|Acidaminococcus fermentans, Anaerotruncus ciliolominis|Acidaminococcus fermentans, Atopobium parvulum|Acidaminococcus fermentans, Atopobium rimae|Acidaminococcus fermentans, Atopobium vaginae|Acidaminococcus fermentans, Bacteroides caccae|Acidaminococcus fermentans, Bacteroides cellulosilyticus|Acidaminococcus fermentans, Bacteroides coprocola|Acidaminococcus fermentans, Bacteroides coprophilus|Acidaminococcus fermentans, Bacteroides dorei|Acidaminococcus fermentans, Bacteroides eggerthii|Acidaminococcus fermentans, Bacteroides finegoldii|Acidaminococcus fermentans, Bacteroides fragilis|Acidaminococcus fermentans, Bacteroides helgogens|Acidaminococcus fermentans, Bacteroides intestinalis|Acidaminococcus fermentans, Bacteroides ovatus|Acidaminococcus fermentans, Bacteroides pectinophilus|Acidaminococcus fermentans, Bacteroides plebeius|Acidaminococcus fermentans, Bacteroides salanitronis|Acidaminococcus fermentans, Bacteroides sp. 1_1_6|Acidaminococcus fermentans, Bacteroides sp. 3_1_23|Acidaminococcus fermentans, Bacteroides stercoris|Acidaminococcus fermentans, Bacteroides thetaiotaomicron|Acidaminococcus fermentans, Bacteroides uniformis|Acidaminococcus fermentans, Bacteroides vulgatus|Acidaminococcus fermentans, Bacteroides xylanisolvens|Acidaminococcus fermentans, Bifidobacterium adolescentis|Acidaminococcus fermentans, Bifidobacterium angulatum|Acidaminococcus fermentans, Bifidobacterium animalis|Acidaminococcus fermentans, Bifidobacterium bifidum|Acidaminococcus fermentans, Bifidobacterium breve|Acidaminococcus fermentans, Bifidobacterium catenulatum|Acidaminococcus fermentans, Bifidobacterium dentium|Acidaminococcus fermentans, Bifidobacterium infantis|Acidaminococcus fermentans, Bifidobacterium longum|Acidaminococcus fermentans, Bifidobacterium pseudocatenulatum|Acidaminococcus fermentans, Bifidobacterium wadsworthii|Acidaminococcus fermentans, Blautia hansenii|Acidaminococcus fermentans, Blautia hydrogenotrophica|Acidaminococcus fermentans, Blautia producta|Acidaminococcus fermentans, Blautia schinkii|Acidaminococcus fermentans, Brevibacterium linens|Acidaminococcus fermentans, Brucella ceti|Acidaminococcus fermentans, Brucella suis|Acidaminococcus fermentans, Bulliedia extracta|Acidaminococcus fermentans, Butyrivibrio crossotus|Acidaminococcus fermentans, Campylobacter concisus|Acidaminococcus fermentans, Campylobacter curvus|Acidaminococcus fermentans, Campylobacter gracilis|Acidaminococcus fermentans, Campylobacter hominis|Acidaminococcus fermentans, Capnocytophaga ochracea|Acidaminococcus fermentans, Cardiobacterium hominis|Acidaminococcus fermentans, Catenibacterium mitsuokai|Acidaminococcus fermentans, Catonella morbi|Acidaminococcus fermentans, Citrobacter koseri|Acidaminococcus fermentans, Clostridium asparagiforme|Acidaminococcus fermentans, Clostridium bartlettii|Acidaminococcus fermentans, Clostridium botulinum|Acidaminococcus fermentans, Clostridium butyricum|Acidaminococcus fermentans, Clostridium difficile|Acidaminococcus fermentans, Clostridium disporicum|Acidaminococcus fermentans, Clostridium hathewayi|Acidaminococcus fermentans, Clostridium hylemonae|Acidaminococcus fermentans, Clostridium innocuum|Acidaminococcus fermentans, Clostridium leptum|Acidaminococcus fermentans, Clostridium mayombeii|Acidaminococcus fermentans, Clostridium methylpentosum|Acidaminococcus fermentans, Clostridium nexile|Acidaminococcus fermentans, Clostridium orbiscindens|Acidaminococcus fermentans, Clostridium perfringens|Acidaminococcus fermentans, Clostridium saccharolyticum|Acidaminococcus fermentans, Clostridium scindens|Acidaminococcus fermentans, Clostridium symbiosum|Acidaminococcus fermentans, Clostridium tertium|Acidaminococcus fermentans, Collinsella aerofaciens|Acidaminococcus fermentans, Collinsella intestinalis|Acidaminococcus fermentans, Collinsella stercoris|Acidaminococcus fermentans, Coprobacillus sp. D7|Acidaminococcus fermentans, Coprococcus catus|Acidaminococcus fermentans, Coprococcus comes|Acidaminococcus fermentans, Coprococcus eutactus|Acidaminococcus fermentans, Corynebacterium aurimucosum|Acidaminococcus fermentans, Corynebacterium matruchotii|Acidaminococcus fermentans, Cryptobacterium curtum|Acidaminococcus fermentans, Desulfovibrio desulfuricans|Acidaminococcus fermentans, Desulfovibrio piger|Acidaminococcus fermentans, Dialister invisus|Acidaminococcus fermentans, Dialister microaerophilus|Acidaminococcus fermentans, Dorea formicigenerans|Acidaminococcus fermentans, Dorea longicatena|Acidaminococcus fermentans, Eggerthella lenta|Acidaminococcus fermentans, Eikenella corrodens|Acidaminococcus fermentans, Enterobacter cancerogenus|Acidaminococcus fermentans, Enterobacter cloacae|Acidaminococcus fermentans, Enterococcus faecalis|Acidaminococcus fermentans, Enterococcus faecium|Acidaminococcus fermentans, Enterococcus gallinarum|Acidaminococcus fermentans, Erysipelotrichaceae bacterium 3_1_53|Acidaminococcus fermentans, Escherichia coli|Acidaminococcus fermentans, Escherichia fergusonii|Acidaminococcus fermentans, Ethanoligenens harbinense|Acidaminococcus fermentans, Eubacterium cellulosolvens|Acidaminococcus fermentans, Eubacterium eligens|Acidaminococcus fermentans, Eubacterium hallii|Acidaminococcus fermentans, Eubacterium limosum|Acidaminococcus fermentans, Eubacterium rectale|Acidaminococcus fermentans, Eubacterium siraeum|Acidaminococcus fermentans, Eubacterium

ventriosum|Acidaminococcus fermentans, Faecalibacterium prausnitzii|Acidaminococcus fermentans, Finegoldia magna|Acidaminococcus fermentans, Fusobacterium gonidiaformans|Acidaminococcus fermentans, Fusobacterium mortiferum|Acidaminococcus fermentans, Fusobacterium nucleatum|Acidaminococcus fermentans, Fusobacterium varium|Acidaminococcus fermentans, Gardnerella vaginalis|Acidaminococcus fermentans, Gemella haemolysans|Acidaminococcus fermentans, Gemella morbillorum|Acidaminococcus fermentans, Gordonia bacter pamelae|Acidaminococcus fermentans, Granulicatella adiacens|Acidaminococcus fermentans, Granulicatella elegans|Acidaminococcus fermentans, Haemophilus influenzae|Acidaminococcus fermentans, Haemophilus parainfluenzae|Acidaminococcus fermentans, Helicobacter pullorum|Acidaminococcus fermentans, Helicobacter pylori|Acidaminococcus fermentans, Holdemania filiformis|Acidaminococcus fermentans, Kingella oralis|Acidaminococcus fermentans, Klebsiella pneumoniae|Acidaminococcus fermentans, Klebsiella variicola|Acidaminococcus fermentans, Lachnospiraceae bacterium 5_1_57FAA|Acidaminococcus fermentans, Lactobacillus acidophilus|Acidaminococcus fermentans, Lactobacillus amylovorus|Acidaminococcus fermentans, Lactobacillus brevis|Acidaminococcus fermentans, Lactobacillus casei|Acidaminococcus fermentans, Lactobacillus crispatus|Acidaminococcus fermentans, Lactobacillus delbrueckii|Acidaminococcus fermentans, Lactobacillus fermentum|Acidaminococcus fermentans, Lactobacillus gasseri|Acidaminococcus fermentans, Lactobacillus iners|Acidaminococcus fermentans, Lactobacillus jensenii|Acidaminococcus fermentans, Lactobacillus johnsonii|Acidaminococcus fermentans, Lactobacillus paracasei|Acidaminococcus fermentans, Lactobacillus plantarum|Acidaminococcus fermentans, Lactobacillus reuteri|Acidaminococcus fermentans, Lactobacillus rhamnosus|Acidaminococcus fermentans, Lactobacillus ruminis|Acidaminococcus fermentans, Lactobacillus sakei|Acidaminococcus fermentans, Lactobacillus salivarius|Acidaminococcus fermentans, Lactococcus lactis|Acidaminococcus fermentans, Lautropia mirabilis|Acidaminococcus fermentans, Leuconostoc citreum|Acidaminococcus fermentans, Leuconostoc gasicomitatum|Acidaminococcus fermentans, Leuconostoc mesenteroides|Acidaminococcus fermentans, Listeria monocytogenes|Acidaminococcus fermentans, Marvinbryantia formatexigens|Acidaminococcus fermentans, Megamonas hypermegale|Acidaminococcus fermentans, Megaspheara micronuciformis|Acidaminococcus fermentans, Methanobrevibacter smithii|Acidaminococcus fermentans, Methanospheara stadmanae|Acidaminococcus fermentans, Methylobacterium radiotolerans|Acidaminococcus fermentans, Mitsuokella multacida|Acidaminococcus fermentans, Mobiluncus curtisii|Acidaminococcus fermentans, Mycoplasma hominis|Acidaminococcus fermentans, Neisseria mucosa|Acidaminococcus fermentans, Odoribacter splanchnicus|Acidaminococcus fermentans, Olsenella ulii|Acidaminococcus fermentans, Oribacterium sinus|Acidaminococcus fermentans, Oxalobacter formigenes|Acidaminococcus fermentans, Parabacteroides distasonis|Acidaminococcus fermentans, Parabacteroides johnsonii|Acidaminococcus fermentans, Parabacteroides merdae|Acidaminococcus fermentans, Parvimonas micra|Acidaminococcus fermentans, Pediococcus acidilactici|Acidaminococcus fermentans, Pediococcus pentosaceus|Acidaminococcus fermentans, Peptoniphilus duerdenii|Acidaminococcus fermentans, Peptoniphilus harei|Acidaminococcus fermentans, Peptoniphilus lacrimalis|Acidaminococcus fermentans, Peptostreptococcus anaerobius|Acidaminococcus fermentans, Peptostreptococcus stomatis|Acidaminococcus fermentans, Porphyromonas asaccharolytica|Acidaminococcus fermentans, Porphyromonas uenonis|Acidaminococcus fermentans, Prevotella amnii|Acidaminococcus fermentans, Prevotella bergensis|Acidaminococcus fermentans, Prevotella bivia|Acidaminococcus fermentans, Prevotella buccae|Acidaminococcus fermentans, Prevotella buccalis|Acidaminococcus fermentans, Prevotella copri|Acidaminococcus fermentans, Prevotella disiens|Acidaminococcus fermentans, Prevotella melaninogenica|Acidaminococcus fermentans, Prevotella multiformis|Acidaminococcus fermentans, Prevotella oralis|Acidaminococcus fermentans, Prevotella oris|Acidaminococcus fermentans, Prevotella salivae|Acidaminococcus fermentans, Prevotella timonensis|Acidaminococcus fermentans, Propionibacterium acnes|Acidaminococcus fermentans, Propionibacterium freudenreichii|Acidaminococcus fermentans, Proteus mirabilis|Acidaminococcus fermentans, Proteus penneri|Acidaminococcus fermentans, Pseudoflavonifractor capillosus|Acidaminococcus fermentans, Pseudomonas aeruginosa|Acidaminococcus fermentans, Pseudomonas fluorescens|Acidaminococcus fermentans, Pseudomonas putida|Acidaminococcus fermentans, Pseudoramibacter alactolyticus|Acidaminococcus fermentans, Pyramidobacter piscicola|Acidaminococcus fermentans, Rhodospseudomonas palustris|Acidaminococcus fermentans, Roseburia intestinalis|Acidaminococcus fermentans, Roseburia inulinivorans|Acidaminococcus fermentans, Rothia dentocariosa|Acidaminococcus fermentans, Rothia mucilaginosa|Acidaminococcus fermentans, Ruminococcus albus|Acidaminococcus fermentans, Ruminococcus bromii|Acidaminococcus fermentans, Ruminococcus gnavus|Acidaminococcus fermentans, Ruminococcus lactaris|Acidaminococcus fermentans, Ruminococcus obeum|Acidaminococcus fermentans, Ruminococcus torques|Acidaminococcus fermentans, Selenomonas putigena|Acidaminococcus fermentans, Shigella boydii|Acidaminococcus fermentans, Shigella dysenteriae|Acidaminococcus fermentans, Shigella sonnei|Acidaminococcus fermentans, Slackia exigua|Acidaminococcus fermentans, Solobacterium moorei|Acidaminococcus fermentans, Staphylococcus aureus|Acidaminococcus fermentans, Staphylococcus epidermidis|Acidaminococcus fermentans, Staphylococcus hominis|Acidaminococcus fermentans, Staphylococcus saprophyticus|Acidaminococcus fermentans, Staphylococcus warneri|Acidaminococcus fermentans, Streptococcus agalactiae|Acidaminococcus fermentans, Streptococcus anginosus|Acidaminococcus fermentans, Streptococcus australis|Acidaminococcus fermentans, Streptococcus bovis|Acidaminococcus fermentans, Streptococcus cristatus|Acidaminococcus fermentans, Streptococcus dysgalactiae|Acidaminococcus fermentans, Streptococcus equinus|Acidaminococcus fermentans, Streptococcus gordonii|Acidaminococcus fermentans, Streptococcus infantarius|Acidaminococcus fermentans, Streptococcus infantilis|Acidaminococcus fermentans, Streptococcus mitis|Acidaminococcus fermentans, Streptococcus mutans|Acidaminococcus fermentans, Streptococcus oralis|Acidaminococcus fermentans, Streptococcus peroris|Acidaminococcus fermentans, Streptococcus pneumoniae|Acidaminococcus fermentans, Streptococcus salivarius|Acidaminococcus fermentans, Streptococcus sanguinis|Acidaminococcus fermentans, Streptococcus thermophilus|Acidaminococcus fermentans, Streptococcus vestibularis|Acidaminococcus fermentans, Subdoligranulum variabile|Acidaminococcus fermentans, Succinatimonas hippel|Acidaminococcus fermentans, Sutterella wadsworthensis|Acidaminococcus fermentans, Tropheryma whippelii|Acidaminococcus fermentans, Veillonella atypica|Acidaminococcus fermentans, Veillonella dispar|Acidaminococcus fermentans, Veillonella parvula|Acidaminococcus fermentans, Victivallis vadensis|Acinetobacter baumannii, Acinetobacter baumannii|Acinetobacter baumannii, Acinetobacter johnsonii|Acinetobacter baumannii, Acinetobacter lwoy|Acinetobacter baumannii, Acinetobacter radioradiens|Acinetobacter baumannii, Actinomyces odontolyticus|Acinetobacter baumannii, Actinomyces oris|Acinetobacter baumannii, Actinomyces viscosus|Acinetobacter baumannii, Aerococcus viridans|Acinetobacter baumannii, Aggregatibacter aphrophilus|Acinetobacter baumannii, Aggregatibacter segnis|Acinetobacter baumannii, Akkermansia muciniphila|Acinetobacter baumannii, Alistipes putredinis|Acinetobacter baumannii, Alistipes shahii|Acinetobacter baumannii, Anaerococcus hydrogenalis|Acinetobacter baumannii, Anaerococcus lactolyticus|Acinetobacter baumannii, Anaerococcus vaginalis|Acinetobacter baumannii, Anaerostipes caccae|Acinetobacter baumannii, Anaerotruncus colihominis|Acinetobacter baumannii, Atopobium parvulum|Acinetobacter baumannii, Atopobium rimaie|Acinetobacter baumannii, Atopobium vaginae|Acinetobacter baumannii, Bacteroides caccae|Acinetobacter baumannii, Bacteroides cellulosilyticus|Acinetobacter baumannii, Bacteroides coprococcus|Acinetobacter baumannii, Bacteroides coprophilus|Acinetobacter baumannii, Bacteroides dorei|Acinetobacter baumannii, Bacteroides eggerthii|Acinetobacter baumannii, Bacteroides finegoldii|Acinetobacter baumannii, Bacteroides fragilis|Acinetobacter baumannii, Bacteroides helcogenes|Acinetobacter baumannii, Bacteroides intestinalis|Acinetobacter baumannii, Bacteroides ovatus|Acinetobacter baumannii, Bacteroides pectinophilus|Acinetobacter baumannii, Bacteroides plebeius|Acinetobacter baumannii, Bacteroides salanitronis|Acinetobacter baumannii, Bacteroides sp. 1_1_6|Acinetobacter baumannii, Bacteroides sp. 3_1_23|Acinetobacter baumannii, Bacteroides stercoris|Acinetobacter baumannii, Bacteroides thetaiotaomicron|Acinetobacter baumannii, Bacteroides uniformis|Acinetobacter baumannii, Bacteroides vulgatus|Acinetobacter baumannii, Bacteroides xylanisolvens|Acinetobacter baumannii, Bifidobacterium adolescentis|Acinetobacter baumannii, Bifidobacterium angulatum|Acinetobacter baumannii, Bifidobacterium animalis|Acinetobacter baumannii, Bifidobacterium bifidum|Acinetobacter baumannii, Bifidobacterium breve|Acinetobacter baumannii, Bifidobacterium catenulatum|Acinetobacter baumannii, Bifidobacterium dentium|Acinetobacter baumannii, Bifidobacterium infantis|Acinetobacter baumannii, Bifidobacterium longum|Acinetobacter baumannii, Bifidobacterium pseudocatenulatum|Acinetobacter baumannii, Bilophila wadsworthia|Acinetobacter baumannii, Blautia hansenii|Acinetobacter baumannii, Blautia hydrogenotrophica|Acinetobacter baumannii, Blautia producta|Acinetobacter baumannii, Blautia schinkii|Acinetobacter baumannii, Brevibacterium linens|Acinetobacter baumannii, Brucella ceti|Acinetobacter baumannii, Brucella suis|Acinetobacter baumannii, Bulleidia extructa|Acinetobacter baumannii, Butyrivibrio crossotus|Acinetobacter baumannii, Campylobacter concisus|Acinetobacter baumannii, Campylobacter curvus|Acinetobacter baumannii, Campylobacter gracilis|Acinetobacter baumannii, Campylobacter hominis|Acinetobacter baumannii, Capnocytophaga ochracea|Acinetobacter baumannii, Cardiobacterium hominis|Acinetobacter baumannii, Catenibacterium mitsuokai|Acinetobacter baumannii, Catonella morbi|Acinetobacter baumannii, Citrobacter koseri|Acinetobacter baumannii, Clostridium asparagiforme|Acinetobacter baumannii, Clostridium barlettii|Acinetobacter baumannii, Clostridium botale|Acinetobacter baumannii, Clostridium botulinum|Acinetobacter baumannii, Clostridium butyricum|Acinetobacter baumannii, Clostridium difficile|Acinetobacter baumannii, Clostridium disporicum|Acinetobacter baumannii, Clostridium hathewayi|Acinetobacter baumannii, Clostridium hylemonae|Acinetobacter baumannii, Clostridium innocuum|Acinetobacter baumannii, Clostridium leptum|Acinetobacter baumannii, Clostridium mayombi|Acinetobacter baumannii, Clostridium methylpentosum|Acinetobacter baumannii, Clostridium nexile|Acinetobacter baumannii, Clostridium orbiscindens|Acinetobacter baumannii, Clostridium perfringens|Acinetobacter baumannii, Clostridium saccharolyticum|Acinetobacter baumannii, Clostridium scindens|Acinetobacter baumannii, Clostridium symbiosum|Acinetobacter baumannii, Clostridium tertium|Acinetobacter baumannii, Collinsella aerofaciens|Acinetobacter baumannii, Collinsella intestinalis|Acinetobacter baumannii, Collinsella stercoris|Acinetobacter baumannii, Coprobacillus sp. D7|Acinetobacter baumannii, Coprococcus catus|Acinetobacter baumannii, Coprococcus comes|Acinetobacter baumannii, Coprococcus eutactus|Acinetobacter baumannii, Corynebacterium aurimucosum|Acinetobacter baumannii, Corynebacterium matruchotii|Acinetobacter baumannii, Cryptobacterium curtum|Acinetobacter baumannii, Desulfovibrio desulfuricans|Acinetobacter baumannii, Desulfovibrio piger|Acinetobacter baumannii, Dialister invisus|Acinetobacter baumannii, Dialister microaerophilus|Acinetobacter baumannii, Dorea formicigenerans|Acinetobacter baumannii, Dorea longicatena|Acinetobacter baumannii, Eggerthella lenta|Acinetobacter baumannii, Eikenella corrodens|Acinetobacter baumannii, Enterobacter cancerogenus|Acinetobacter baumannii, Enterobacter cloacae|Acinetobacter baumannii, Enterococcus faecalis|Acinetobacter baumannii, Enterococcus faecium|Acinetobacter baumannii, Enterococcus gallinarum|Acinetobacter baumannii, Erysipelotrichaceae bacterium 3_1_53|Acinetobacter baumannii, Escherichia coli|Acinetobacter baumannii, Escherichia fergusonii|Acinetobacter baumannii, Ethanoligenens harbinense|Acinetobacter baumannii, Eubacterium cellulosolvens|Acinetobacter baumannii, Eubacterium eligens|Acinetobacter baumannii, Eubacterium hallii|Acinetobacter baumannii, Eubacterium limosum|Acinetobacter baumannii, Eubacterium rectale|Acinetobacter baumannii, Eubacterium siraeum|Acinetobacter baumannii, Eubacterium ventriosum|Acinetobacter baumannii, Faecalibacterium prausnitzii|Acinetobacter baumannii, Finegoldia magna|Acinetobacter baumannii, Fusobacterium gonidiaformans|Acinetobacter baumannii, Fusobacterium mortiferum|Acinetobacter baumannii, Fusobacterium nucleatum|Acinetobacter baumannii, Fusobacterium varium|Acinetobacter baumannii, Gardnerella vaginalis|Acinetobacter baumannii, Gemella haemolysans|Acinetobacter baumannii, Gemella morbillorum|Acinetobacter baumannii, Gordonia bacter pamelae|Acinetobacter baumannii, Granulicatella adiacens|Acinetobacter baumannii, Granulicatella elegans|Acinetobacter baumannii, Haemophilus influenzae|Acinetobacter baumannii, Helicobacter pullorum|Acinetobacter baumannii, Helicobacter pylori|Acinetobacter baumannii, Holdemania filiformis|Acinetobacter baumannii, Kingella oralis|Acinetobacter baumannii, Klebsiella pneumoniae|Acinetobacter baumannii, Klebsiella variicola|Acinetobacter baumannii, Lachnospiraceae bacterium 5_1_57FAA|Acinetobacter baumannii, Lactobacillus acidophilus|Acinetobacter baumannii, Lactobacillus amylovorus|Acinetobacter baumannii, Lactobacillus brevis|Acinetobacter baumannii, Lactobacillus casei|Acinetobacter baumannii, Lactobacillus crispatus|Acinetobacter baumannii, Lactobacillus delbrueckii|Acinetobacter baumannii, Lactobacillus fermentum|Acinetobacter baumannii, Lactobacillus gasseri|Acinetobacter baumannii, Lactobacillus iners|Acinetobacter baumannii, Lactobacillus jensenii|Acinetobacter baumannii, Lactobacillus johnsonii|Acinetobacter baumannii, Lactobacillus paracasei|Acinetobacter baumannii, Lactobacillus plantarum|Acinetobacter baumannii, Lactobacillus reuteri|Acinetobacter baumannii, Lactobacillus rhamnosus|Acinetobacter baumannii, Lactobacillus ruminis|Acinetobacter baumannii, Lactobacillus sakei|Acinetobacter baumannii, Lactobacillus salivarius|Acinetobacter baumannii, Lactococcus lactis|Acinetobacter baumannii, Lautropia mirabilis|Acinetobacter baumannii, Leuconostoc citreum|Acinetobacter baumannii, Leuconostoc gasicomitatum|Acinetobacter baumannii, Leuconostoc mesenteroides|Acinetobacter baumannii, Listeria monocytogenes|Acinetobacter baumannii, Marvinbryantia formatexigens|Acinetobacter baumannii, Megamonas hypermegale|Acinetobacter baumannii, Megaspheara micronuciformis|Acinetobacter baumannii, Methanobrevibacter smithii|Acinetobacter baumannii, Methanospheara stadmanae|Acinetobacter baumannii, Methylobacterium radiotolerans|Acinetobacter baumannii, Mitsuokella multacida|Acinetobacter baumannii, Mobiluncus curtisii|Acinetobacter baumannii, Mycoplasma hominis|Acinetobacter baumannii, Neisseria mucosa|Acinetobacter baumannii, Odoribacter splanchnicus|Acinetobacter baumannii, Olsenella ulii|Acinetobacter baumannii, Oribacterium sinus|Acinetobacter baumannii, Oxalobacter formigenes|Acinetobacter baumannii, Parabacteroides distasonis|Acinetobacter baumannii, Parabacteroides johnsonii|Acinetobacter baumannii, Parabacteroides merdae|Acinetobacter baumannii, Parvimonas micra|Acinetobacter baumannii, Pediococcus acidilactici|Acinetobacter baumannii, Pediococcus pentosaceus|Acinetobacter baumannii, Peptoniphilus duerdenii|Acinetobacter baumannii, Peptoniphilus harei|Acinetobacter baumannii, Peptoniphilus lacrimalis|Acinetobacter baumannii, Peptostreptococcus anaerobius|Acinetobacter baumannii, Peptostreptococcus stomatis|Acinetobacter baumannii, Porphyromonas asaccharolytica|Acinetobacter baumannii, Porphyromonas uenonis|Acinetobacter baumannii, Prevotella amnii|Acinetobacter baumannii, Prevotella bergensis|Acinetobacter baumannii, Prevotella bivia|Acinetobacter baumannii, Prevotella buccae|Acinetobacter baumannii, Prevotella buccalis|Acinetobacter baumannii, Prevotella copri|Acinetobacter baumannii, Prevotella disiens|Acinetobacter baumannii, Prevotella melaninogenica|Acinetobacter baumannii, Prevotella multiformis|Acinetobacter baumannii, Prevotella oralis|Acinetobacter baumannii, Prevotella oris|Acinetobacter baumannii, Prevotella salivae|Acinetobacter baumannii, Prevotella timonensis|Acinetobacter baumannii, Propionibacterium acnes|Acinetobacter baumannii, Propionibacterium freudenreichii|Acinetobacter baumannii, Proteus mirabilis|Acinetobacter baumannii, Proteus penneri|Acinetobacter baumannii, Pseudoflavonifractor capillosus|Acinetobacter baumannii, Pseudomonas aeruginosa|Acinetobacter baumannii, Pseudomonas fluorescens|Acinetobacter baumannii, Pseudomonas putida|Acinetobacter baumannii, Pseudoramibacter alactolyticus|Acinetobacter baumannii, Pyramidobacter piscicola|Acinetobacter baumannii, Rhodospseudomonas palustris|Acinetobacter baumannii, Roseburia intestinalis|Acinetobacter baumannii, Roseburia inulinivorans|Acinetobacter baumannii, Rothia dentocariosa|Acinetobacter baumannii, Rothia mucilaginosa|Acinetobacter baumannii, Ruminococcus albus|Acinetobacter baumannii, Ruminococcus bromii|Acinetobacter baumannii, Ruminococcus gnavus|Acinetobacter baumannii, Ruminococcus lactaris|Acinetobacter baumannii, Ruminococcus obeum|Acinetobacter baumannii, Ruminococcus torques|Acinetobacter baumannii, Selenomonas putigena|Acinetobacter baumannii, Shigella boydii|Acinetobacter baumannii, Shigella dysenteriae|Acinetobacter baumannii, Shigella sonnei|Acinetobacter baumannii, Slackia exigua|Acinetobacter baumannii, Solobacterium

101

Iwofiii,Erysipelotrichaceae bacterium 3_1_53|Acinetobacter Iwofiii,Escherichia coli|Acinetobacter Iwofiii,Escherichia fergusonii|Acinetobacter Iwofiii,Ethanoligenes harbinense|Acinetobacter Iwofiii,Eubacterium cellulosolvens|Acinetobacter Iwofiii,Eubacterium eligens|Acinetobacter Iwofiii,Eubacterium hallii|Acinetobacter Iwofiii,Eubacterium limosum|Acinetobacter Iwofiii,Eubacterium rectale|Acinetobacter Iwofiii,Eubacterium siraeum|Acinetobacter Iwofiii,Eubacterium ventriosum|Acinetobacter Iwofiii,Faecalibacterium prausnitzii|Acinetobacter Iwofiii,Finegoldia magna|Acinetobacter Iwofiii,Fusobacterium gonidiaformans|Acinetobacter Iwofiii,Fusobacterium mortiferum|Acinetobacter Iwofiii,Fusobacterium nucleatum|Acinetobacter Iwofiii,Fusobacterium varium|Acinetobacter Iwofiii,Gardnerella vaginalis|Acinetobacter Iwofiii,Gemella haemolyans|Acinetobacter Iwofiii,Gemella morbillorum|Acinetobacter Iwofiii,Gordonibacter pamelaeae|Acinetobacter Iwofiii,Granulicatella adiacens|Acinetobacter Iwofiii,Granulicatella elegans|Acinetobacter Iwofiii,Haemophilus influenzae|Acinetobacter Iwofiii,Haemophilus parainfluenzae|Acinetobacter Iwofiii,Helicobacter pullorum|Acinetobacter Iwofiii,Helicobacter pylori|Acinetobacter Iwofiii,Holdemania filiformis|Acinetobacter Iwofiii,Kingella oralis|Acinetobacter Iwofiii,Klebsiella pneumoniae|Acinetobacter Iwofiii,Klebsiella variicola|Acinetobacter Iwofiii,Lachnospiraceae bacterium 5_1_57FAA|Acinetobacter Iwofiii,Lactobacillus acidophilus|Acinetobacter Iwofiii,Lactobacillus amylovorus|Acinetobacter Iwofiii,Lactobacillus brevis|Acinetobacter Iwofiii,Lactobacillus casei|Acinetobacter Iwofiii,Lactobacillus crispatus|Acinetobacter Iwofiii,Lactobacillus delbrueckii|Acinetobacter Iwofiii,Lactobacillus fermentum|Acinetobacter Iwofiii,Lactobacillus gasseri|Acinetobacter Iwofiii,Lactobacillus iners|Acinetobacter Iwofiii,Lactobacillus jensenii|Acinetobacter Iwofiii,Lactobacillus johnsonii|Acinetobacter Iwofiii,Lactobacillus paracasei|Acinetobacter Iwofiii,Lactobacillus plantarum|Acinetobacter Iwofiii,Lactobacillus reuteri|Acinetobacter Iwofiii,Lactobacillus rhamnosus|Acinetobacter Iwofiii,Lactobacillus sakei|Acinetobacter Iwofiii,Lactobacillus salivarius|Acinetobacter Iwofiii,Lactococcus lactis|Acinetobacter Iwofiii,Lautropia mirabilis|Acinetobacter Iwofiii,Leuconostoc citreum|Acinetobacter Iwofiii,Leuconostoc gasicomitatum|Acinetobacter Iwofiii,Leuconostoc mesenteroides|Acinetobacter Iwofiii,Listeria monocytogenes|Acinetobacter Iwofiii,Marvinbryantia formatexigens|Acinetobacter Iwofiii,Megamonas hypermegale|Acinetobacter Iwofiii,Megasphaera micronuciformis|Acinetobacter Iwofiii,Methanobrevibacter smithii|Acinetobacter Iwofiii,Methanospaera stadtmanae|Acinetobacter Iwofiii,Methylobacterium radiotolerans|Acinetobacter Iwofiii,Mitsuokella multacida|Acinetobacter Iwofiii,Mobiluncus curtisii|Acinetobacter Iwofiii,Mycoplasma hominis|Acinetobacter Iwofiii,Neisseria mucosa|Acinetobacter Iwofiii,Odoribacter splanchnicus|Acinetobacter Iwofiii,Olsenella ulii|Acinetobacter Iwofiii,Oribacterium sinus|Acinetobacter Iwofiii,Oxalobacter formigenes|Acinetobacter Iwofiii,Parabacteroides distans|Acinetobacter Iwofiii,Parabacteroides johnsonii|Acinetobacter Iwofiii,Parabacteroides merdae|Acinetobacter Iwofiii,Parvimonas micra|Acinetobacter Iwofiii,Pediococcus acidilactici|Acinetobacter Iwofiii,Pediococcus pentosaceus|Acinetobacter Iwofiii,Peptoniphilus duerdenii|Acinetobacter Iwofiii,Peptoniphilus harei|Acinetobacter Iwofiii,Peptoniphilus lacrimalis|Acinetobacter Iwofiii,Peptostreptococcus anaerobius|Acinetobacter Iwofiii,Peptostreptococcus stomatis|Acinetobacter Iwofiii,Porphyromonas asaccharolytica|Acinetobacter Iwofiii,Porphyromonas uenonis|Acinetobacter Iwofiii,Prevotella amnii|Acinetobacter Iwofiii,Prevotella bergensis|Acinetobacter Iwofiii,Prevotella bivia|Acinetobacter Iwofiii,Prevotella buccae|Acinetobacter Iwofiii,Prevotella buccalis|Acinetobacter Iwofiii,Prevotella copri|Acinetobacter Iwofiii,Prevotella disiens|Acinetobacter Iwofiii,Prevotella melanogena|Acinetobacter Iwofiii,Prevotella multiiformis|Acinetobacter Iwofiii,Prevotella oralis|Acinetobacter Iwofiii,Prevotella oris|Acinetobacter Iwofiii,Prevotella salivae|Acinetobacter Iwofiii,Prevotella timonensis|Acinetobacter Iwofiii,Propionibacterium acnes|Acinetobacter Iwofiii,Propionibacterium freudenreichii|Acinetobacter Iwofiii,Proteus mirabilis|Acinetobacter Iwofiii,Proteus penneri|Acinetobacter Iwofiii,Pseudoflavonifractor capillosus|Acinetobacter Iwofiii,Pseudomonas aeruginosa|Acinetobacter Iwofiii,Pseudomonas fluorescens|Acinetobacter Iwofiii,Pseudomonas putida|Acinetobacter Iwofiii,Pseudoramibacter alactolyticus|Acinetobacter Iwofiii,Pyramidobacter piscicola|Acinetobacter Iwofiii,Rhodopseudomonas palustris|Acinetobacter Iwofiii,Roseburia intestinalis|Acinetobacter Iwofiii,Roseburia inulinivorans|Acinetobacter Iwofiii,Rothia dentocariosa|Acinetobacter Iwofiii,Rothia mucilaginosa|Acinetobacter Iwofiii,Ruminococcus albus|Acinetobacter Iwofiii,Ruminococcus bromii|Acinetobacter Iwofiii,Ruminococcus gnavus|Acinetobacter Iwofiii,Ruminococcus lactaris|Acinetobacter Iwofiii,Ruminococcus obeum|Acinetobacter Iwofiii,Ruminococcus torques|Acinetobacter Iwofiii,Selenomonas sputigena|Acinetobacter Iwofiii,Shigella boydii|Acinetobacter Iwofiii,Shigella dysenteriae|Acinetobacter Iwofiii,Shigella sonnei|Acinetobacter Iwofiii,Slackia exigua|Acinetobacter Iwofiii,Solobacterium moorei|Acinetobacter Iwofiii,Staphylococcus aureus|Acinetobacter Iwofiii,Staphylococcus epidermidis|Acinetobacter Iwofiii,Staphylococcus hominis|Acinetobacter Iwofiii,Staphylococcus saprophyticus|Acinetobacter Iwofiii,Staphylococcus warneri|Acinetobacter Iwofiii,Streptococcus agalactiae|Acinetobacter Iwofiii,Streptococcus anginosus|Acinetobacter Iwofiii,Streptococcus australis|Acinetobacter Iwofiii,Streptococcus bovis|Acinetobacter Iwofiii,Streptococcus cristatus|Acinetobacter Iwofiii,Streptococcus dysgalactiae|Acinetobacter Iwofiii,Streptococcus equinus|Acinetobacter Iwofiii,Streptococcus gordonii|Acinetobacter Iwofiii,Streptococcus infantarius|Acinetobacter Iwofiii,Streptococcus infantis|Acinetobacter Iwofiii,Streptococcus mitis|Acinetobacter Iwofiii,Streptococcus mutans|Acinetobacter Iwofiii,Streptococcus oralis|Acinetobacter Iwofiii,Streptococcus parasanguis|Acinetobacter Iwofiii,Streptococcus peroris|Acinetobacter Iwofiii,Streptococcus pneumoniae|Acinetobacter Iwofiii,Streptococcus salivarius|Acinetobacter Iwofiii,Streptococcus sanguinis|Acinetobacter Iwofiii,Streptococcus thermophilus|Acinetobacter Iwofiii,Streptococcus vestibularis|Acinetobacter Iwofiii,Subdoligranulum variabile|Acinetobacter Iwofiii,Succinatimonas hippelii|Acinetobacter Iwofiii,Sutterella wadsworthensis|Acinetobacter Iwofiii,Tropheryma whipplei|Acinetobacter Iwofiii,Veillonella atypica|Acinetobacter Iwofiii,Veillonella dispar|Acinetobacter Iwofiii,Veillonella parvula|Acinetobacter Iwofiii,Victivallis vadensis|Acinetobacter radioresistens,Acinetobacter radioresistens,Acinetobacter radioresistens,Actinomyces odontolyticus|Acinetobacter radioresistens,Actinomyces oris|Acinetobacter radioresistens,Actinomyces viscosus|Acinetobacter radioresistens,Aerococcus viridans|Acinetobacter radioresistens,Aggregatibacter aphrophilus|Acinetobacter radioresistens,Aggregatibacter segnis|Acinetobacter radioresistens,Akkermansia muciniphila|Acinetobacter radioresistens,Alistipes putredinis|Acinetobacter radioresistens,Alistipes shahii|Acinetobacter radioresistens,Anaerococcus hydrogenalis|Acinetobacter radioresistens,Anaerococcus lactolyticus|Acinetobacter radioresistens,Anaerococcus vaginalis|Acinetobacter radioresistens,Anaerostipes caccae|Acinetobacter radioresistens,Anaerotruncus colihominis|Acinetobacter radioresistens,Atopobium parvulum|Acinetobacter radioresistens,Atopobium rinae|Acinetobacter radioresistens,Atopobium vaginae|Acinetobacter radioresistens,Bacteroides caccae|Acinetobacter radioresistens,Bacteroides cellulosilyticus|Acinetobacter radioresistens,Bacteroides coprocola|Acinetobacter radioresistens,Bacteroides coprophilus|Acinetobacter radioresistens,Bacteroides dorei|Acinetobacter radioresistens,Bacteroides eggerthii|Acinetobacter radioresistens,Bacteroides finegoldii|Acinetobacter radioresistens,Bacteroides fragilis|Acinetobacter radioresistens,Bacteroides helgocenes|Acinetobacter radioresistens,Bacteroides intestinalis|Acinetobacter radioresistens,Bacteroides ovatus|Acinetobacter radioresistens,Bacteroides pectinophilus|Acinetobacter radioresistens,Bacteroides plebeius|Acinetobacter radioresistens,Bacteroides salanitronis|Acinetobacter radioresistens,Bacteroides sp. 1_1_6|Acinetobacter radioresistens,Bacteroides sp. 3_1_23|Acinetobacter radioresistens,Bacteroides stercoris|Acinetobacter radioresistens,Bacteroides thetaiotaomicron|Acinetobacter radioresistens,Bacteroides uniformis|Acinetobacter radioresistens,Bacteroides vulgatus|Acinetobacter radioresistens,Bacteroides xylanisolvens|Acinetobacter radioresistens,Bifidobacterium adolescentis|Acinetobacter radioresistens,Bifidobacterium angulatum|Acinetobacter radioresistens,Bifidobacterium animalis|Acinetobacter radioresistens,Bifidobacterium bifidum|Acinetobacter radioresistens,Bifidobacterium breve|Acinetobacter radioresistens,Bifidobacterium catenulatum|Acinetobacter radioresistens,Bifidobacterium dentium|Acinetobacter radioresistens,Bifidobacterium infantis|Acinetobacter radioresistens,Bifidobacterium longum|Acinetobacter radioresistens,Bifidobacterium pseudocatenulatum|Acinetobacter radioresistens,Bifidobacterium schweithartii|Acinetobacter radioresistens,Blautia hansenii|Acinetobacter radioresistens,Blautia hydrogenotrophica|Acinetobacter radioresistens,Blautia producta|Acinetobacter radioresistens,Blautia wadsworthii|Acinetobacter radioresistens,Brevibacterium linum|Acinetobacter radioresistens,Bruceella ceti|Acinetobacter radioresistens,Bruceella suis|Acinetobacter radioresistens,Bulleidia extracta|Acinetobacter radioresistens,Butyrivibrio crossotus|Acinetobacter radioresistens,Campylobacter concisus|Acinetobacter radioresistens,Campylobacter curvus|Acinetobacter radioresistens,Campylobacter gracilis|Acinetobacter radioresistens,Campylobacter hominis|Acinetobacter radioresistens,Capnocytophaga ochracea|Acinetobacter radioresistens,Cardiobacterium hominis|Acinetobacter radioresistens,Catenibacterium mitsuokai|Acinetobacter radioresistens,Catonella morbi|Acinetobacter radioresistens,Citrobacter koseri|Acinetobacter radioresistens,Clostridium asparagiforme|Acinetobacter radioresistens,Clostridium bartlettii|Acinetobacter radioresistens,Clostridium botulinum|Acinetobacter radioresistens,Clostridium butyricum|Acinetobacter radioresistens,Clostridium difficile|Acinetobacter radioresistens,Clostridium disporicum|Acinetobacter radioresistens,Clostridium hathewayi|Acinetobacter radioresistens,Clostridium hylemonae|Acinetobacter radioresistens,Clostridium innocuum|Acinetobacter radioresistens,Clostridium leptum|Acinetobacter radioresistens,Clostridium mayombeyi|Acinetobacter radioresistens,Clostridium methylpentosum|Acinetobacter radioresistens,Clostridium nexile|Acinetobacter radioresistens,Clostridium orbiscindens|Acinetobacter radioresistens,Clostridium perfringens|Acinetobacter radioresistens,Clostridium saccharolyticum|Acinetobacter radioresistens,Clostridium scindens|Acinetobacter radioresistens,Clostridium symbiosum|Acinetobacter radioresistens,Clostridium tertium|Acinetobacter radioresistens,Collinsella aerofaciens|Acinetobacter radioresistens,Collinsella intestinalis|Acinetobacter radioresistens,Collinsella stercoris|Acinetobacter radioresistens,Coprobacillus sp. D7|Acinetobacter radioresistens,Coprococcus catus|Acinetobacter radioresistens,Coprococcus comes|Acinetobacter radioresistens,Coprococcus eutactus|Acinetobacter radioresistens,Corynebacterium aurimucosum|Acinetobacter radioresistens,Corynebacterium matruchotii|Acinetobacter radioresistens,Cryptobacterium curtum|Acinetobacter radioresistens,Desulfovibrio desulfuricans|Acinetobacter radioresistens,Desulfovibrio piger|Acinetobacter radioresistens,Dialister invisus|Acinetobacter radioresistens,Dialister microaerophilus|Acinetobacter radioresistens,Dorea formicigenerans|Acinetobacter radioresistens,Dorea longicatena|Acinetobacter radioresistens,Eggerthella lenta|Acinetobacter radioresistens,Eikenella corrodens|Acinetobacter radioresistens,Enterobacter cancerogenus|Acinetobacter radioresistens,Enterobacter cloacae|Acinetobacter radioresistens,Enterococcus faecalis|Acinetobacter radioresistens,Enterococcus faecium|Acinetobacter radioresistens,Enterococcus gallinarum|Acinetobacter radioresistens,Erysipelotrichaceae bacterium 3_1_53|Acinetobacter radioresistens,Escherichia coli|Acinetobacter radioresistens,Escherichia fergusonii|Acinetobacter radioresistens,Ethanoligenes harbinense|Acinetobacter radioresistens,Eubacterium cellulosolvens|Acinetobacter radioresistens,Eubacterium eligens|Acinetobacter radioresistens,Eubacterium hallii|Acinetobacter radioresistens,Eubacterium limosum|Acinetobacter radioresistens,Eubacterium rectale|Acinetobacter radioresistens,Eubacterium siraeum|Acinetobacter radioresistens,Eubacterium ventriosum|Acinetobacter radioresistens,Faecalibacterium prausnitzii|Acinetobacter radioresistens,Finegoldia magna|Acinetobacter radioresistens,Fusobacterium gonidiaformans|Acinetobacter radioresistens,Fusobacterium mortiferum|Acinetobacter radioresistens,Fusobacterium nucleatum|Acinetobacter radioresistens,Fusobacterium varium|Acinetobacter radioresistens,Gardnerella vaginalis|Acinetobacter radioresistens,Gemella haemolyans|Acinetobacter radioresistens,Gemella morbillorum|Acinetobacter radioresistens,Gordonibacter pamelaeae|Acinetobacter radioresistens,Granulicatella adiacens|Acinetobacter radioresistens,Granulicatella elegans|Acinetobacter radioresistens,Haemophilus influenzae|Acinetobacter radioresistens,Haemophilus parainfluenzae|Acinetobacter radioresistens,Helicobacter pullorum|Acinetobacter radioresistens,Helicobacter pylori|Acinetobacter radioresistens,Holdemania filiformis|Acinetobacter radioresistens,Kingella oralis|Acinetobacter radioresistens,Klebsiella pneumoniae|Acinetobacter radioresistens,Klebsiella variicola|Acinetobacter radioresistens,Lachnospiraceae bacterium 5_1_57FAA|Acinetobacter radioresistens,Lactobacillus acidophilus|Acinetobacter radioresistens,Lactobacillus amylovorus|Acinetobacter radioresistens,Lactobacillus brevis|Acinetobacter radioresistens,Lactobacillus casei|Acinetobacter radioresistens,Lactobacillus crispatus|Acinetobacter radioresistens,Lactobacillus delbrueckii|Acinetobacter radioresistens,Lactobacillus fermentum|Acinetobacter radioresistens,Lactobacillus gasseri|Acinetobacter radioresistens,Lactobacillus iners|Acinetobacter radioresistens,Lactobacillus jensenii|Acinetobacter radioresistens,Lactobacillus johnsonii|Acinetobacter radioresistens,Lactobacillus paracasei|Acinetobacter radioresistens,Lactobacillus plantarum|Acinetobacter radioresistens,Lactobacillus reuteri|Acinetobacter radioresistens,Lactobacillus rhamnosus|Acinetobacter radioresistens,Lactobacillus ruminis|Acinetobacter radioresistens,Lactobacillus sakei|Acinetobacter radioresistens,Lactobacillus salivarius|Acinetobacter radioresistens,Lactococcus lactis|Acinetobacter radioresistens,Lautropia mirabilis|Acinetobacter radioresistens,Leuconostoc citreum|Acinetobacter radioresistens,Leuconostoc gasicomitatum|Acinetobacter radioresistens,Leuconostoc mesenteroides|Acinetobacter radioresistens,Listeria monocytogenes|Acinetobacter radioresistens,Marvinbryantia formatexigens|Acinetobacter radioresistens,Megamonas hypermegale|Acinetobacter radioresistens,Megasphaera micronuciformis|Acinetobacter radioresistens,Methanobrevibacter smithii|Acinetobacter radioresistens,Methanospaera stadtmanae|Acinetobacter radioresistens,Methylobacterium radiotolerans|Acinetobacter radioresistens,Mitsuokella multacida|Acinetobacter radioresistens,Mobiluncus curtisii|Acinetobacter radioresistens,Mycoplasma hominis|Acinetobacter radioresistens,Neisseria mucosa|Acinetobacter radioresistens,Odoribacter splanchnicus|Acinetobacter radioresistens,Olsenella ulii|Acinetobacter radioresistens,Oribacterium sinus|Acinetobacter radioresistens,Oxalobacter formigenes|Acinetobacter radioresistens,Parabacteroides distans|Acinetobacter radioresistens,Parabacteroides merdae|Acinetobacter radioresistens,Parvimonas micra|Acinetobacter radioresistens,Pediococcus acidilactici|Acinetobacter radioresistens,Pediococcus pentosaceus|Acinetobacter radioresistens,Peptoniphilus duerdenii|Acinetobacter radioresistens,Peptoniphilus harei|Acinetobacter radioresistens,Peptoniphilus lacrimalis|Acinetobacter radioresistens,Peptostreptococcus anaerobius|Acinetobacter radioresistens,Peptostreptococcus stomatis|Acinetobacter radioresistens,Porphyromonas asaccharolytica|Acinetobacter radioresistens,Porphyromonas uenonis|Acinetobacter radioresistens,Prevotella amnii|Acinetobacter radioresistens,Prevotella bergensis|Acinetobacter radioresistens,Prevotella bivia|Acinetobacter radioresistens,Prevotella buccae|Acinetobacter radioresistens,Prevotella buccalis|Acinetobacter radioresistens,Prevotella copri|Acinetobacter radioresistens,Prevotella disiens|Acinetobacter radioresistens,Prevotella melanogena|Acinetobacter radioresistens,Prevotella multiiformis|Acinetobacter radioresistens,Prevotella oralis|Acinetobacter radioresistens,Prevotella oris|Acinetobacter radioresistens,Prevotella salivae|Acinetobacter radioresistens,Prevotella timonensis|Acinetobacter radioresistens,Propionibacterium acnes|Acinetobacter radioresistens,Propionibacterium freudenreichii|Acinetobacter radioresistens,Proteus mirabilis|Acinetobacter radioresistens,Proteus penneri|Acinetobacter radioresistens,Pseudoflavonifractor capillosus|Acinetobacter radioresistens,Pseudomonas aeruginosa|Acinetobacter radioresistens,Pseudomonas fluorescens|Acinetobacter radioresistens,Pseudomonas putida|Acinetobacter radioresistens,Pseudoramibacter alactolyticus|Acinetobacter radioresistens,Pyramidobacter piscicola|Acinetobacter radioresistens,Rhodopseudomonas palustris|Acinetobacter radioresistens,Roseburia intestinalis|Acinetobacter radioresistens,Roseburia inulinivorans|Acinetobacter radioresistens,Rothia dentocariosa|Acinetobacter radioresistens,Rothia mucilaginosa|Acinetobacter radioresistens,Ruminococcus albus|Acinetobacter radioresistens,Ruminococcus bromii|Acinetobacter radioresistens,Ruminococcus gnavus|Acinetobacter radioresistens,Ruminococcus lactaris|Acinetobacter radioresistens,Ruminococcus obeum|Acinetobacter radioresistens,Ruminococcus torques|Acinetobacter radioresistens,Selenomonas sputigena|Acinetobacter radioresistens,Shigella boydii|Acinetobacter radioresistens,Shigella dysenteriae|Acinetobacter radioresistens,Shigella sonnei|Acinetobacter radioresistens,Slackia exigua|Acinetobacter radioresistens,Solobacterium moorei|Acinetobacter radioresistens,Staphylococcus aureus|Acinetobacter radioresistens,Staphylococcus epidermidis|Acinetobacter radioresistens,Staphylococcus hominis|Acinetobacter radioresistens,Staphylococcus saprophyticus|Acinetobacter radioresistens,Staphylococcus

103

3_1_53|Actinomyces oris,Escherichia coli|Actinomyces oris,Escherichia fergusonii|Actinomyces oris,Ethanoligenens harbinense|Actinomyces oris,Eubacterium cellulosolvens|Actinomyces oris,Eubacterium eligens|Actinomyces oris,Eubacterium hallii|Actinomyces oris,Eubacterium limosum|Actinomyces oris,Eubacterium rectale|Actinomyces oris,Eubacterium siraeum|Actinomyces oris,Eubacterium ventriosum|Actinomyces oris,Faecalibacterium prausnitzii|Actinomyces oris,Finegoldia magna|Actinomyces oris,Fusobacterium gonidiaformans|Actinomyces oris,Fusobacterium mortiferum|Actinomyces oris,Fusobacterium nucleatum|Actinomyces oris,Fusobacterium varium|Actinomyces oris,Gardnerella vaginalis|Actinomyces oris,Gemella haemolyans|Actinomyces oris,Gemella morbillorum|Actinomyces oris,Gordonibacter pameleae|Actinomyces oris,Granulicatella adiacens|Actinomyces oris,Granulicatella elegans|Actinomyces oris,Haemophilus influenzae|Actinomyces oris,Haemophilus parainfluenzae|Actinomyces oris,Helicobacter pullorum|Actinomyces oris,Helicobacter pylori|Actinomyces oris,Holdenmania filiformis|Actinomyces oris,Kingella oralis|Actinomyces oris,Klebsiella pneumoniae|Actinomyces oris,Klebsiella variicola|Actinomyces oris,Lachnospiraceae bacterium 5_1_57FAA|Actinomyces oris,Lactobacillus acidophilus|Actinomyces oris,Lactobacillus amylovorus|Actinomyces oris,Lactobacillus brevis|Actinomyces oris,Lactobacillus casei|Actinomyces oris,Lactobacillus crispatus|Actinomyces oris,Lactobacillus delbrueckii|Actinomyces oris,Lactobacillus fermentum|Actinomyces oris,Lactobacillus gasseri|Actinomyces oris,Lactobacillus iners|Actinomyces oris,Lactobacillus jensenii|Actinomyces oris,Lactobacillus johnsonii|Actinomyces oris,Lactobacillus paracasei|Actinomyces oris,Lactobacillus plantarum|Actinomyces oris,Lactobacillus reuteri|Actinomyces oris,Lactobacillus rhamnosus|Actinomyces oris,Lactobacillus ruminis|Actinomyces oris,Lactobacillus sakei|Actinomyces oris,Lactobacillus salivarius|Actinomyces oris,Lactococcus lactis|Actinomyces oris,Lautropia mirabilis|Actinomyces oris,Leuconostoc citreum|Actinomyces oris,Leuconostoc gasicomitatum|Actinomyces oris,Leuconostoc mesenteroides|Actinomyces oris,Listeria monocytogenes|Actinomyces oris,Marvinbryantia formatexigens|Actinomyces oris,Megamonas hypermegale|Actinomyces oris,Megasphaera micronuciformis|Actinomyces oris,Methanobrevibacter smithii|Actinomyces oris,Methanospaera stadtmannae|Actinomyces oris,Methylobacterium radiotolerans|Actinomyces oris,Mitsuokella multacida|Actinomyces oris,Mobiluncus curtisii|Actinomyces oris,Mycoplasma hominis|Actinomyces oris,Neisseria mucosa|Actinomyces oris,Odoribacter splanchnicus|Actinomyces oris,Olsenella ulii|Actinomyces oris,Oribacterium sinus|Actinomyces oris,Oxalobacter formigenes|Actinomyces oris,Parabacteroides distasonis|Actinomyces oris,Parabacteroides johnsonii|Actinomyces oris,Parabacteroides merdae|Actinomyces oris,Parvimonas micra|Actinomyces oris,Pediococcus acidilactici|Actinomyces oris,Pediococcus pentosaceus|Actinomyces oris,Peptoniphilus duerdenii|Actinomyces oris,Peptoniphilus harei|Actinomyces oris,Peptoniphilus lacrimalis|Actinomyces oris,Peptostreptococcus anaerobius|Actinomyces oris,Peptostreptococcus stomatis|Actinomyces oris,Porphyromonas asaccharolytica|Actinomyces oris,Porphyromonas uenonis|Actinomyces oris,Prevotella amnii|Actinomyces oris,Prevotella bergensis|Actinomyces oris,Prevotella bivia|Actinomyces oris,Prevotella buccae|Actinomyces oris,Prevotella buccalis|Actinomyces oris,Prevotella copri|Actinomyces oris,Prevotella disiens|Actinomyces oris,Prevotella melaninogenica|Actinomyces oris,Prevotella multiformis|Actinomyces oris,Prevotella oralis|Actinomyces oris,Prevotella oris|Actinomyces oris,Prevotella salivae|Actinomyces oris,Prevotella timonensis|Actinomyces oris,Propionibacterium acnes|Actinomyces oris,Propionibacterium freudenreichii|Actinomyces oris,Proteus mirabilis|Actinomyces oris,Proteus penneri|Actinomyces oris,Pseudoflavonifractor capillosus|Actinomyces oris,Pseudomonas aeruginosa|Actinomyces oris,Pseudomonas fluorescens|Actinomyces oris,Pseudomonas putida|Actinomyces oris,Pseudoramibacter alactolyticus|Actinomyces oris,Pyramidobacter piscosens|Actinomyces oris,Rhodospseudomonas palustris|Actinomyces oris,Roseburia intestinalis|Actinomyces oris,Roseburia multivorans|Actinomyces oris,Rothia dentocariosa|Actinomyces oris,Rothia mucilaginosa|Actinomyces oris,Ruminococcus albus|Actinomyces oris,Ruminococcus bromii|Actinomyces oris,Ruminococcus gnavus|Actinomyces oris,Ruminococcus lactaris|Actinomyces oris,Ruminococcus obeum|Actinomyces oris,Ruminococcus torques|Actinomyces oris,Selenomonas sputigena|Actinomyces oris,Shigella boydii|Actinomyces oris,Shigella dysenteriae|Actinomyces oris,Shigella sonnei|Actinomyces oris,Slackia exigua|Actinomyces oris,Solobacterium moorei|Actinomyces oris,Staphylococcus aureus|Actinomyces oris,Staphylococcus epidermidis|Actinomyces oris,Staphylococcus hominis|Actinomyces oris,Staphylococcus saprophyticus|Actinomyces oris,Staphylococcus warneri|Actinomyces oris,Streptococcus agalactiae|Actinomyces oris,Streptococcus anginosus|Actinomyces oris,Streptococcus australis|Actinomyces oris,Streptococcus bovis|Actinomyces oris,Streptococcus cristatus|Actinomyces oris,Streptococcus dysgalactiae|Actinomyces oris,Streptococcus equinus|Actinomyces oris,Streptococcus gordonii|Actinomyces oris,Streptococcus infantarius|Actinomyces oris,Streptococcus infantis|Actinomyces oris,Streptococcus mitis|Actinomyces oris,Streptococcus mutans|Actinomyces oris,Streptococcus oralis|Actinomyces oris,Streptococcus parasanguinis|Actinomyces oris,Streptococcus peroris|Actinomyces oris,Streptococcus pneumoniae|Actinomyces oris,Streptococcus salivarius|Actinomyces oris,Streptococcus sanguinis|Actinomyces oris,Streptococcus thermophilus|Actinomyces oris,Streptococcus vestibularis|Actinomyces oris,Subdoligranulum variable|Actinomyces oris,Succinatimonas hippei|Actinomyces oris,Sutterella wadsworthensis|Actinomyces oris,Tropheryma whippelii|Actinomyces oris,Veillonella atypica|Actinomyces oris,Veillonella dispar|Actinomyces oris,Veillonella parvula|Actinomyces oris,Victivallis vadensis|Actinomyces viscosus,Actinomyces viscosus|Actinomyces viscosus,Aerococcus viridans|Actinomyces viscosus,Aggregatibacter aphrophilus|Actinomyces viscosus,Aggregatibacter segnis|Actinomyces viscosus,Akkermansia muciniphila|Actinomyces viscosus,Alistipes putredinis|Actinomyces viscosus,Alistipes shahii|Actinomyces viscosus,Anaerococcus hydrogenalis|Actinomyces viscosus,Anaerococcus lactolyticus|Actinomyces viscosus,Anaerococcus vaginalis|Actinomyces viscosus,Anaerostipes caccae|Actinomyces viscosus,Anaerotruncus colihominis|Actinomyces viscosus,Atopobium parvulum|Actinomyces viscosus,Atopobium rimae|Actinomyces viscosus,Atopobium vaginae|Actinomyces viscosus,Bacteroides caccae|Actinomyces viscosus,Bacteroides cellulosilyticus|Actinomyces viscosus,Bacteroides coprocola|Actinomyces viscosus,Bacteroides coprophilus|Actinomyces viscosus,Bacteroides dorei|Actinomyces viscosus,Bacteroides eggerthii|Actinomyces viscosus,Bacteroides finegoldii|Actinomyces viscosus,Bacteroides fragilis|Actinomyces viscosus,Bacteroides helgones|Actinomyces viscosus,Bacteroides intestinalis|Actinomyces viscosus,Bacteroides ovatus|Actinomyces viscosus,Bacteroides pectinophilus|Actinomyces viscosus,Bacteroides plebeius|Actinomyces viscosus,Bacteroides salamitronis|Actinomyces viscosus,Bacteroides sp. 1_1_6|Actinomyces viscosus,Bacteroides sp. 3_1_23|Actinomyces viscosus,Bacteroides stercoris|Actinomyces viscosus,Bacteroides thetaiotaomicron|Actinomyces viscosus,Bacteroides uniformis|Actinomyces viscosus,Bacteroides vulgatus|Actinomyces viscosus,Bacteroides xylinus|Actinomyces viscosus,Bifidobacterium adolescentis|Actinomyces viscosus,Bifidobacterium angulatum|Actinomyces viscosus,Bifidobacterium animalis|Actinomyces viscosus,Bifidobacterium bifidum|Actinomyces viscosus,Bifidobacterium breve|Actinomyces viscosus,Bifidobacterium catenulatum|Actinomyces viscosus,Bifidobacterium dentium|Actinomyces viscosus,Bifidobacterium infantis|Actinomyces viscosus,Bifidobacterium longum|Actinomyces viscosus,Bifidobacterium pseudocatenulatum|Actinomyces viscosus,Bilophila wadsworthia|Actinomyces viscosus,Blautia hanseni|Actinomyces viscosus,Blautia hydrognotrophica|Actinomyces viscosus,Blautia producta|Actinomyces viscosus,Blautia schinkii|Actinomyces viscosus,Brevibacterium linens|Actinomyces viscosus,Bruella ceti|Actinomyces viscosus,Bruella suis|Actinomyces viscosus,Bulleidia extructa|Actinomyces viscosus,Butyrivibrio crossotus|Actinomyces viscosus,Campylobacter concisus|Actinomyces viscosus,Campylobacter curvus|Actinomyces viscosus,Campylobacter gracilis|Actinomyces viscosus,Campylobacter hominis|Actinomyces viscosus,Carnocytophaga ochracea|Actinomyces viscosus,Cardiobacterium hominis|Actinomyces viscosus,Catenibacterium mitsuokai|Actinomyces viscosus,Catonella morbi|Actinomyces viscosus,Citrobacter koseri|Actinomyces viscosus,Clostridium asparagiforme|Actinomyces viscosus,Clostridium barlettii|Actinomyces viscosus,Clostridium bolteae|Actinomyces viscosus,Clostridium botulinum|Actinomyces viscosus,Clostridium butyricum|Actinomyces viscosus,Clostridium difficile|Actinomyces viscosus,Clostridium disporicum|Actinomyces viscosus,Clostridium hathewayi|Actinomyces viscosus,Clostridium hylemonae|Actinomyces viscosus,Clostridium innocuum|Actinomyces viscosus,Clostridium leptum|Actinomyces viscosus,Clostridium mayonbei|Actinomyces viscosus,Clostridium methylpentosum|Actinomyces viscosus,Clostridium nexile|Actinomyces viscosus,Clostridium orbiscindens|Actinomyces viscosus,Clostridium perfringens|Actinomyces viscosus,Clostridium saccharolyticum|Actinomyces viscosus,Clostridium scindens|Actinomyces viscosus,Clostridium symbiosum|Actinomyces viscosus,Clostridium tertium|Actinomyces viscosus,Collinsella aerofaciens|Actinomyces viscosus,Collinsella intestinalis|Actinomyces viscosus,Collinsella stercoris|Actinomyces viscosus,Coprobacillus sp. D7|Actinomyces viscosus,Coprococcus catus|Actinomyces viscosus,Coprococcus comes|Actinomyces viscosus,Coprococcus eutactus|Actinomyces viscosus,Corynebacterium aurimucosum|Actinomyces viscosus,Corynebacterium matruchotii|Actinomyces viscosus,Cryptobacterium curtum|Actinomyces viscosus,Desulfovibrio desulfuricans|Actinomyces viscosus,Desulfovibrio piger|Actinomyces viscosus,Dialister invisus|Actinomyces viscosus,Dialister microaerophilus|Actinomyces viscosus,Dorea formicigenerans|Actinomyces viscosus,Dorea longicatena|Actinomyces viscosus,Eggerthella lenta|Actinomyces viscosus,Eikenella corrodens|Actinomyces viscosus,Enterobacter cancerogenus|Actinomyces viscosus,Enterobacter cloacae|Actinomyces viscosus,Enterococcus faecalis|Actinomyces viscosus,Enterococcus faecium|Actinomyces viscosus,Enterococcus gallinarum|Actinomyces viscosus,Erysipelotrichaceae bacterium 3_1_53|Actinomyces viscosus,Escherichia coli|Actinomyces viscosus,Escherichia fergusonii|Actinomyces viscosus,Ethanoligenens harbinense|Actinomyces viscosus,Eubacterium cellulosolvens|Actinomyces viscosus,Eubacterium eligens|Actinomyces viscosus,Eubacterium hallii|Actinomyces viscosus,Eubacterium limosum|Actinomyces viscosus,Eubacterium rectale|Actinomyces viscosus,Eubacterium siraeum|Actinomyces viscosus,Eubacterium ventriosum|Actinomyces viscosus,Faecalibacterium prausnitzii|Actinomyces viscosus,Finegoldia magna|Actinomyces viscosus,Fusobacterium gonidiaformans|Actinomyces viscosus,Fusobacterium mortiferum|Actinomyces viscosus,Fusobacterium nucleatum|Actinomyces viscosus,Fusobacterium varium|Actinomyces viscosus,Gardnerella vaginalis|Actinomyces viscosus,Gemella haemolyans|Actinomyces viscosus,Gemella morbillorum|Actinomyces viscosus,Gordonibacter pameleae|Actinomyces viscosus,Granulicatella adiacens|Actinomyces viscosus,Granulicatella elegans|Actinomyces viscosus,Haemophilus influenzae|Actinomyces viscosus,Helicobacter pullorum|Actinomyces viscosus,Helicobacter pylori|Actinomyces viscosus,Holdenmania filiformis|Actinomyces viscosus,Kingella oralis|Actinomyces viscosus,Klebsiella pneumoniae|Actinomyces viscosus,Klebsiella variicola|Actinomyces viscosus,Lachnospiraceae bacterium 5_1_57FAA|Actinomyces viscosus,Lactobacillus acidophilus|Actinomyces viscosus,Lactobacillus amylovorus|Actinomyces viscosus,Lactobacillus brevis|Actinomyces viscosus,Lactobacillus casei|Actinomyces viscosus,Lactobacillus crispatus|Actinomyces viscosus,Lactobacillus delbrueckii|Actinomyces viscosus,Lactobacillus fermentum|Actinomyces viscosus,Lactobacillus gasseri|Actinomyces viscosus,Lactobacillus iners|Actinomyces viscosus,Lactobacillus jensenii|Actinomyces viscosus,Lactobacillus johnsonii|Actinomyces viscosus,Lactobacillus paracasei|Actinomyces viscosus,Lactobacillus plantarum|Actinomyces viscosus,Lactobacillus reuteri|Actinomyces viscosus,Lactobacillus rhamnosus|Actinomyces viscosus,Lactobacillus ruminis|Actinomyces viscosus,Lactobacillus sakei|Actinomyces viscosus,Lactobacillus salivarius|Actinomyces viscosus,Lactococcus lactis|Actinomyces viscosus,Lautropia mirabilis|Actinomyces viscosus,Leuconostoc citreum|Actinomyces viscosus,Leuconostoc gasicomitatum|Actinomyces viscosus,Leuconostoc mesenteroides|Actinomyces viscosus,Listeria monocytogenes|Actinomyces viscosus,Marvinbryantia formatexigens|Actinomyces viscosus,Megamonas hypermegale|Actinomyces viscosus,Megasphaera micronuciformis|Actinomyces viscosus,Methanobrevibacter smithii|Actinomyces viscosus,Methanospaera stadtmannae|Actinomyces viscosus,Methylobacterium radiotolerans|Actinomyces viscosus,Mitsuokella multacida|Actinomyces viscosus,Mobiluncus curtisii|Actinomyces viscosus,Mycoplasma hominis|Actinomyces viscosus,Neisseria mucosa|Actinomyces viscosus,Odoribacter splanchnicus|Actinomyces viscosus,Olsenella ulii|Actinomyces viscosus,Oribacterium sinus|Actinomyces viscosus,Oxalobacter formigenes|Actinomyces viscosus,Parabacteroides distasonis|Actinomyces viscosus,Parabacteroides johnsonii|Actinomyces viscosus,Parabacteroides merdae|Actinomyces viscosus,Parvimonas micra|Actinomyces viscosus,Pediococcus acidilactici|Actinomyces viscosus,Pediococcus pentosaceus|Actinomyces viscosus,Peptoniphilus duerdenii|Actinomyces viscosus,Peptoniphilus harei|Actinomyces viscosus,Peptoniphilus lacrimalis|Actinomyces viscosus,Peptostreptococcus anaerobius|Actinomyces viscosus,Peptostreptococcus stomatis|Actinomyces viscosus,Porphyromonas asaccharolytica|Actinomyces viscosus,Porphyromonas uenonis|Actinomyces viscosus,Prevotella amnii|Actinomyces viscosus,Prevotella bergensis|Actinomyces viscosus,Prevotella bivia|Actinomyces viscosus,Prevotella buccae|Actinomyces viscosus,Prevotella buccalis|Actinomyces viscosus,Prevotella copri|Actinomyces viscosus,Prevotella disiens|Actinomyces viscosus,Prevotella melaninogenica|Actinomyces viscosus,Prevotella multiformis|Actinomyces viscosus,Prevotella oralis|Actinomyces viscosus,Prevotella oris|Actinomyces viscosus,Prevotella salivae|Actinomyces viscosus,Prevotella timonensis|Actinomyces viscosus,Propionibacterium acnes|Actinomyces viscosus,Propionibacterium freudenreichii|Actinomyces viscosus,Proteus mirabilis|Actinomyces viscosus,Proteus penneri|Actinomyces viscosus,Pseudoflavonifractor capillosus|Actinomyces viscosus,Pseudomonas aeruginosa|Actinomyces viscosus,Pseudomonas fluorescens|Actinomyces viscosus,Pseudomonas putida|Actinomyces viscosus,Pseudoramibacter alactolyticus|Actinomyces viscosus,Pyramidobacter piscosens|Actinomyces viscosus,Rhodospseudomonas palustris|Actinomyces viscosus,Roseburia intestinalis|Actinomyces viscosus,Roseburia multivorans|Actinomyces viscosus,Rothia dentocariosa|Actinomyces viscosus,Rothia mucilaginosa|Actinomyces viscosus,Ruminococcus albus|Actinomyces viscosus,Ruminococcus bromii|Actinomyces viscosus,Ruminococcus gnavus|Actinomyces viscosus,Ruminococcus lactaris|Actinomyces viscosus,Ruminococcus obeum|Actinomyces viscosus,Ruminococcus torques|Actinomyces viscosus,Selenomonas sputigena|Actinomyces viscosus,Shigella boydii|Actinomyces viscosus,Shigella dysenteriae|Actinomyces viscosus,Shigella sonnei|Actinomyces viscosus,Slackia exigua|Actinomyces viscosus,Solobacterium moorei|Actinomyces viscosus,Staphylococcus aureus|Actinomyces viscosus,Staphylococcus epidermidis|Actinomyces viscosus,Staphylococcus hominis|Actinomyces viscosus,Staphylococcus saprophyticus|Actinomyces viscosus,Staphylococcus warneri|Actinomyces viscosus,Streptococcus agalactiae|Actinomyces viscosus,Streptococcus anginosus|Actinomyces viscosus,Streptococcus australis|Actinomyces viscosus,Streptococcus bovis|Actinomyces viscosus,Streptococcus cristatus|Actinomyces viscosus,Streptococcus dysgalactiae|Actinomyces viscosus,Streptococcus equinus|Actinomyces viscosus,Streptococcus gordonii|Actinomyces viscosus,Streptococcus infantarius|Actinomyces viscosus,Streptococcus infantis|Actinomyces viscosus,Streptococcus mitis|Actinomyces viscosus,Streptococcus mutans|Actinomyces viscosus,Streptococcus oralis|Actinomyces viscosus,Streptococcus parasanguinis|Actinomyces viscosus,Streptococcus peroris|Actinomyces viscosus,Streptococcus pneumoniae|Actinomyces viscosus,Streptococcus salivarius|Actinomyces viscosus,Streptococcus sanguinis|Actinomyces viscosus,Streptococcus thermophilus|Actinomyces viscosus,Streptococcus vestibularis|Actinomyces viscosus,Subdoligranulum variable|Actinomyces viscosus,Succinatimonas hippei|Actinomyces viscosus,Sutterella wadsworthensis|Actinomyces viscosus,Tropheryma whippelii|Actinomyces viscosus,Veillonella atypica|Actinomyces viscosus,Veillonella dispar|Actinomyces viscosus,Veillonella parvula|Actinomyces viscosus,Victivallis vadensis|Aerococcus viridans,Aerococcus viridans|Aerococcus viridans,Aggregatibacter aphrophilus|Aerococcus viridans,Aggregatibacter segnis|Aerococcus viridans,Akkermansia muciniphila|Aerococcus viridans,Alistipes putredinis|Aerococcus viridans,Alistipes shahii|Aerococcus viridans,Anaerococcus hydrogenalis|Aerococcus viridans,Anaerococcus lactolyticus|Aerococcus viridans,Anaerococcus vaginalis|Aerococcus viridans,Anaerostipes caccae|Aerococcus viridans,Anaerotruncus colihominis|Aerococcus viridans,Atopobium parvulum|Aerococcus viridans,Atopobium rimae|Aerococcus viridans,Atopobium vaginae|Aerococcus viridans,Bacteroides caccae|Aerococcus viridans,Bacteroides cellulosilyticus|Aerococcus viridans,Bacteroides coprocola|Aerococcus viridans,Bacteroides coprophilus|Aerococcus viridans,Bacteroides dorei|Aerococcus viridans,Bacteroides eggerthii|Aerococcus viridans,Bacteroides finegoldii|Aerococcus viridans,Bacteroides fragilis|Aerococcus viridans,Bacteroides

105

aphrophilus, Mobiluncus curtisii|Aggregatibacter aphrophilus, Mycoplasma hominis|Aggregatibacter aphrophilus, Neisseria mucosa|Aggregatibacter aphrophilus, Odoribacter splanchnicus|Aggregatibacter aphrophilus, Olsenella uli|Aggregatibacter aphrophilus, Oribacterium sinus|Aggregatibacter aphrophilus, Oxalobacter formigenes|Aggregatibacter aphrophilus, Parabacteroides distasonis|Aggregatibacter aphrophilus, Parabacteroides johnsonii|Aggregatibacter aphrophilus, Parabacteroides merdae|Aggregatibacter aphrophilus, Parvimonas micra|Aggregatibacter aphrophilus, Pedicoccus acidilactici|Aggregatibacter aphrophilus, Pedicoccus pentosaceus|Aggregatibacter aphrophilus, Peptoniphilus duerdenii|Aggregatibacter aphrophilus, Peptoniphilus harei|Aggregatibacter aphrophilus, Peptoniphilus lacrimalis|Aggregatibacter aphrophilus, Peptostreptococcus anaerobius|Aggregatibacter aphrophilus, Peptostreptococcus stomatis|Aggregatibacter aphrophilus, Porphyromonas asaccharolytica|Aggregatibacter aphrophilus, Porphyromonas uenonis|Aggregatibacter aphrophilus, Prevotella amnii|Aggregatibacter aphrophilus, Prevotella bergensis|Aggregatibacter aphrophilus, Prevotella bivia|Aggregatibacter aphrophilus, Prevotella buccae|Aggregatibacter aphrophilus, Prevotella buccalis|Aggregatibacter aphrophilus, Prevotella copri|Aggregatibacter aphrophilus, Prevotella disiens|Aggregatibacter aphrophilus, Prevotella melaninogenica|Aggregatibacter aphrophilus, Prevotella multiformis|Aggregatibacter aphrophilus, Prevotella oralis|Aggregatibacter aphrophilus, Prevotella oris|Aggregatibacter aphrophilus, Prevotella salivae|Aggregatibacter aphrophilus, Prevotella timonensis|Aggregatibacter aphrophilus, Propionibacterium acnes|Aggregatibacter aphrophilus, Propionibacterium freudenreichii|Aggregatibacter aphrophilus, Proteus mirabilis|Aggregatibacter aphrophilus, Proteus penneri|Aggregatibacter aphrophilus, Pseudoflavonifractor capillosus|Aggregatibacter aphrophilus, Pseudomonas aeruginosa|Aggregatibacter aphrophilus, Pseudomonas fluorescens|Aggregatibacter aphrophilus, Pseudomonas putida|Aggregatibacter aphrophilus, Pseudoramibacter alactolyticus|Aggregatibacter aphrophilus, Pyramidobacter piscolens|Aggregatibacter aphrophilus, Rhodopseudomonas palustris|Aggregatibacter aphrophilus, Roseburia intestinalis|Aggregatibacter aphrophilus, Roseburia inulinivorans|Aggregatibacter aphrophilus, Rothia dentocariosa|Aggregatibacter aphrophilus, Rothia mucilaginosa|Aggregatibacter aphrophilus, Ruminococcus albus|Aggregatibacter aphrophilus, Ruminococcus bromii|Aggregatibacter aphrophilus, Ruminococcus gnavus|Aggregatibacter aphrophilus, Ruminococcus lactaris|Aggregatibacter aphrophilus, Ruminococcus obeum|Aggregatibacter aphrophilus, Ruminococcus torques|Aggregatibacter aphrophilus, Selenomonas spuitigena|Aggregatibacter aphrophilus, Shigella boydii|Aggregatibacter aphrophilus, Shigella dysenteriae|Aggregatibacter aphrophilus, Shigella sonnei|Aggregatibacter aphrophilus, Slackia exigua|Aggregatibacter aphrophilus, Solobacterium moorei|Aggregatibacter aphrophilus, Staphylococcus aureus|Aggregatibacter aphrophilus, Staphylococcus epidermidis|Aggregatibacter aphrophilus, Staphylococcus hominis|Aggregatibacter aphrophilus, Staphylococcus saprophyticus|Aggregatibacter aphrophilus, Staphylococcus warneri|Aggregatibacter aphrophilus, Streptococcus agalactiae|Aggregatibacter aphrophilus, Streptococcus anginosus|Aggregatibacter aphrophilus, Streptococcus australis|Aggregatibacter aphrophilus, Streptococcus bovis|Aggregatibacter aphrophilus, Streptococcus cristatus|Aggregatibacter aphrophilus, Streptococcus dysgalactiae|Aggregatibacter aphrophilus, Streptococcus equinus|Aggregatibacter aphrophilus, Streptococcus gordonii|Aggregatibacter aphrophilus, Streptococcus infantarius|Aggregatibacter aphrophilus, Streptococcus infantis|Aggregatibacter aphrophilus, Streptococcus mitis|Aggregatibacter aphrophilus, Streptococcus mutans|Aggregatibacter aphrophilus, Streptococcus oralis|Aggregatibacter aphrophilus, Streptococcus parasanguinis|Aggregatibacter aphrophilus, Streptococcus peroris|Aggregatibacter aphrophilus, Streptococcus pneumoniae|Aggregatibacter aphrophilus, Streptococcus salivarius|Aggregatibacter aphrophilus, Streptococcus sanguinis|Aggregatibacter aphrophilus, Streptococcus thermophilus|Aggregatibacter aphrophilus, Streptococcus vestibularis|Aggregatibacter aphrophilus, Subdoligranulum variabile|Aggregatibacter aphrophilus, Succinatimonas hippei|Aggregatibacter aphrophilus, Sutterella wadsworthensis|Aggregatibacter aphrophilus, Tropheryma whippelii|Aggregatibacter aphrophilus, Veillonella atypica|Aggregatibacter aphrophilus, Veillonella dispar|Aggregatibacter aphrophilus, Veillonella parvula|Aggregatibacter aphrophilus, Victivallis vadensis|Aggregatibacter segnis, Aggregatibacter segnis|Aggregatibacter segnis, Akkermansia muciniphila|Aggregatibacter segnis, Alistipes putredinis|Aggregatibacter segnis, Alistipes shahii|Aggregatibacter segnis, Anaerococcus hydrogenalis|Aggregatibacter segnis, Anaerococcus lactolyticus|Aggregatibacter segnis, Anaerococcus vaginalis|Aggregatibacter segnis, Anaerostipes caccae|Aggregatibacter segnis, Anaerotruncus colihominis|Aggregatibacter segnis, Atopobium parvulum|Aggregatibacter segnis, Atopobium rimae|Aggregatibacter segnis, Atopobium vaginae|Aggregatibacter segnis, Bacteroides caccae|Aggregatibacter segnis, Bacteroides cellulosilyticus|Aggregatibacter segnis, Bacteroides coprocola|Aggregatibacter segnis, Bacteroides coprophilus|Aggregatibacter segnis, Bacteroides dorei|Aggregatibacter segnis, Bacteroides eggertii|Aggregatibacter segnis, Bacteroides finegoldii|Aggregatibacter segnis, Bacteroides fragilis|Aggregatibacter segnis, Bacteroides helgones|Aggregatibacter segnis, Bacteroides intestinalis|Aggregatibacter segnis, Bacteroides ovatus|Aggregatibacter segnis, Bacteroides pectinophilus|Aggregatibacter segnis, Bacteroides plebeius|Aggregatibacter segnis, Bacteroides salanitronis|Aggregatibacter segnis, Bacteroides sp. 1_1_6|Aggregatibacter segnis, Bacteroides vulgatus|Aggregatibacter segnis, Bacteroides stercoris|Aggregatibacter segnis, Bacteroides thetaiotaomicron|Aggregatibacter segnis, Bacteroides uniformis|Aggregatibacter segnis, Bacteroides vulgatus|Aggregatibacter segnis, Bacteroides xylanisolvens|Aggregatibacter segnis, Bifidobacterium adolescentis|Aggregatibacter segnis, Bifidobacterium angulatum|Aggregatibacter segnis, Bifidobacterium animalis|Aggregatibacter segnis, Bifidobacterium bifidum|Aggregatibacter segnis, Bifidobacterium breve|Aggregatibacter segnis, Bifidobacterium catenulatum|Aggregatibacter segnis, Bifidobacterium dentium|Aggregatibacter segnis, Bifidobacterium infantis|Aggregatibacter segnis, Bifidobacterium longum|Aggregatibacter segnis, Bifidobacterium pseudocatenulatum|Aggregatibacter segnis, Bilophila wadsworthii|Aggregatibacter segnis, Blautia hansenii|Aggregatibacter segnis, Blautia hydrogenotrophica|Aggregatibacter segnis, Blautia producta|Aggregatibacter segnis, Blautia schinkii|Aggregatibacter segnis, Brevibacterium linens|Aggregatibacter segnis, Brucella ceti|Aggregatibacter segnis, Brucella suis|Aggregatibacter segnis, Bulleidia extructa|Aggregatibacter segnis, Butyrivibrio crossotus|Aggregatibacter segnis, Campylobacter concisus|Aggregatibacter segnis, Campylobacter curvus|Aggregatibacter segnis, Campylobacter gracilis|Aggregatibacter segnis, Campylobacter hominis|Aggregatibacter segnis, Capnocytophaga ochracea|Aggregatibacter segnis, Cardiobacterium hominis|Aggregatibacter segnis, Catenibacterium mitsuokai|Aggregatibacter segnis, Catonella morbi|Aggregatibacter segnis, Citrobacter koseri|Aggregatibacter segnis, Clostridium asparagiforme|Aggregatibacter segnis, Clostridium bartlettii|Aggregatibacter segnis, Clostridium bolteae|Aggregatibacter segnis, Clostridium botulinum|Aggregatibacter segnis, Clostridium butyricum|Aggregatibacter segnis, Clostridium difficile|Aggregatibacter segnis, Clostridium disporicum|Aggregatibacter segnis, Clostridium hathewayi|Aggregatibacter segnis, Clostridium hylemonae|Aggregatibacter segnis, Clostridium innocuum|Aggregatibacter segnis, Clostridium leptum|Aggregatibacter segnis, Clostridium mayombeyi|Aggregatibacter segnis, Clostridium methylpentosum|Aggregatibacter segnis, Clostridium nexile|Aggregatibacter segnis, Clostridium orbiscindens|Aggregatibacter segnis, Clostridium perfringens|Aggregatibacter segnis, Clostridium saccharolyticum|Aggregatibacter segnis, Clostridium scindens|Aggregatibacter segnis, Clostridium symbiosum|Aggregatibacter segnis, Clostridium tertium|Aggregatibacter segnis, Collinsella aerofaciens|Aggregatibacter segnis, Collinsella intestinalis|Aggregatibacter segnis, Collinsella stercoris|Aggregatibacter segnis, Coprobacillus sp. D7|Aggregatibacter segnis, Coprococcus catus|Aggregatibacter segnis, Coprococcus comes|Aggregatibacter segnis, Coprococcus eutactus|Aggregatibacter segnis, Corynebacterium aurimucosum|Aggregatibacter segnis, Corynebacterium matruchotii|Aggregatibacter segnis, Cryptobacterium curtum|Aggregatibacter segnis, Desulfovibrio desulfuricans|Aggregatibacter segnis, Desulfovibrio piger|Aggregatibacter segnis, Dialister invisus|Aggregatibacter segnis, Dialister microaerophilus|Aggregatibacter segnis, Dorea formicigenerans|Aggregatibacter segnis, Dorea longicatena|Aggregatibacter segnis, Eggerthella lenta|Aggregatibacter segnis, Eikenella corrodens|Aggregatibacter segnis, Enterobacter cancerogenus|Aggregatibacter segnis, Enterobacter cloacae|Aggregatibacter segnis, Enterococcus faecalis|Aggregatibacter segnis, Enterococcus faecium|Aggregatibacter segnis, Enterococcus gallinarum|Aggregatibacter segnis, Erysipelotrichaceae bacterium 3_1_53|Aggregatibacter segnis, Escherichia coli|Aggregatibacter segnis, Escherichia fergusonii|Aggregatibacter segnis, Ethanoligenens harbinensis|Aggregatibacter segnis, Eubacterium cellulolvens|Aggregatibacter segnis, Eubacterium eligens|Aggregatibacter segnis, Eubacterium hallii|Aggregatibacter segnis, Eubacterium limosum|Aggregatibacter segnis, Eubacterium rectale|Aggregatibacter segnis, Eubacterium siraeum|Aggregatibacter segnis, Eubacterium ventriosum|Aggregatibacter segnis, Faecalibacterium prausnitzii|Aggregatibacter segnis, Finegoldia magna|Aggregatibacter segnis, Fusobacterium gonidiaformans|Aggregatibacter segnis, Fusobacterium mortiferum|Aggregatibacter segnis, Fusobacterium nucleatum|Aggregatibacter segnis, Fusobacterium varium|Aggregatibacter segnis, Gardnerella vaginalis|Aggregatibacter segnis, Gemella haemolysans|Aggregatibacter segnis, Gemella morbillorum|Aggregatibacter segnis, Gordonibacter pamelaee|Aggregatibacter segnis, Granulicatella adiacens|Aggregatibacter segnis, Granulicatella elegans|Aggregatibacter segnis, Haemophilus influenzae|Aggregatibacter segnis, Haemophilus parainfluenzae|Aggregatibacter segnis, Helicobacter pylorum|Aggregatibacter segnis, Helicobacter pylori|Aggregatibacter segnis, Holdemania filiformis|Aggregatibacter segnis, Kingella oralis|Aggregatibacter segnis, Klebsiella pneumoniae|Aggregatibacter segnis, Klebsiella varicola|Aggregatibacter segnis, Lachnospiraceae bacterium 5_1_57FAA|Aggregatibacter segnis, Lactobacillus acidophilus|Aggregatibacter segnis, Lactobacillus amylovorus|Aggregatibacter segnis, Lactobacillus brevis|Aggregatibacter segnis, Lactobacillus casei|Aggregatibacter segnis, Lactobacillus crispatus|Aggregatibacter segnis, Lactobacillus delbrueckii|Aggregatibacter segnis, Lactobacillus fermentum|Aggregatibacter segnis, Lactobacillus gasseri|Aggregatibacter segnis, Lactobacillus iners|Aggregatibacter segnis, Lactobacillus jensenii|Aggregatibacter segnis, Lactobacillus johnsonii|Aggregatibacter segnis, Lactobacillus paracasei|Aggregatibacter segnis, Lactobacillus plantarum|Aggregatibacter segnis, Lactobacillus reuteri|Aggregatibacter segnis, Lactobacillus rhamnosus|Aggregatibacter segnis, Lactobacillus ruminus|Aggregatibacter segnis, Lactobacillus sakei|Aggregatibacter segnis, Lactobacillus salivarius|Aggregatibacter segnis, Lactococcus lactis|Aggregatibacter segnis, Lautropia mirabilis|Aggregatibacter segnis, Leuconostoc citreum|Aggregatibacter segnis, Leuconostoc gasicomitatum|Aggregatibacter segnis, Leuconostoc mesenteroides|Aggregatibacter segnis, Listeria monocytogenes|Aggregatibacter segnis, Marvinbryantia formatexigens|Aggregatibacter segnis, Megamonas hypermegalae|Aggregatibacter segnis, Megamonas micromuciformis|Aggregatibacter segnis, Methanobrevibacter smithii|Aggregatibacter segnis, Methanosphera stadmanae|Aggregatibacter segnis, Methylobacterium radiotolerans|Aggregatibacter segnis, Mitsuokella multacida|Aggregatibacter segnis, Mobiluncus curtisii|Aggregatibacter segnis, Mycoplasma hominis|Aggregatibacter segnis, Neisseria mucosa|Aggregatibacter segnis, Odoribacter splanchnicus|Aggregatibacter segnis, Olsenella uli|Aggregatibacter segnis, Oribacterium sinus|Aggregatibacter segnis, Oxalobacter formigenes|Aggregatibacter segnis, Parabacteroides distasonis|Aggregatibacter segnis, Parabacteroides johnsonii|Aggregatibacter segnis, Parabacteroides merdae|Aggregatibacter segnis, Parvimonas micra|Aggregatibacter segnis, Pedicoccus acidilactici|Aggregatibacter segnis, Pedicoccus pentosaceus|Aggregatibacter segnis, Peptoniphilus duerdenii|Aggregatibacter segnis, Peptoniphilus harei|Aggregatibacter segnis, Peptoniphilus lacrimalis|Aggregatibacter segnis, Peptostreptococcus anaerobius|Aggregatibacter segnis, Peptostreptococcus stomatis|Aggregatibacter segnis, Porphyromonas asaccharolytica|Aggregatibacter segnis, Porphyromonas uenonis|Aggregatibacter segnis, Prevotella amnii|Aggregatibacter segnis, Prevotella bergensis|Aggregatibacter segnis, Prevotella bivia|Aggregatibacter segnis, Prevotella buccae|Aggregatibacter segnis, Prevotella buccalis|Aggregatibacter segnis, Prevotella copri|Aggregatibacter segnis, Prevotella disiens|Aggregatibacter segnis, Prevotella melaninogenica|Aggregatibacter segnis, Prevotella multiformis|Aggregatibacter segnis, Prevotella oralis|Aggregatibacter segnis, Prevotella oris|Aggregatibacter segnis, Prevotella salivae|Aggregatibacter segnis, Prevotella timonensis|Aggregatibacter segnis, Propionibacterium acnes|Aggregatibacter segnis, Propionibacterium freudenreichii|Aggregatibacter segnis, Proteus mirabilis|Aggregatibacter segnis, Proteus penneri|Aggregatibacter segnis, Pseudoflavonifractor capillosus|Aggregatibacter segnis, Pseudomonas aeruginosa|Aggregatibacter segnis, Pseudomonas fluorescens|Aggregatibacter segnis, Pseudomonas putida|Aggregatibacter segnis, Pseudoramibacter alactolyticus|Aggregatibacter segnis, Pyramidobacter piscolens|Aggregatibacter segnis, Rhodopseudomonas palustris|Aggregatibacter segnis, Roseburia intestinalis|Aggregatibacter segnis, Roseburia inulinivorans|Aggregatibacter segnis, Rothia dentocariosa|Aggregatibacter segnis, Rothia mucilaginosa|Aggregatibacter segnis, Ruminococcus albus|Aggregatibacter segnis, Ruminococcus bromii|Aggregatibacter segnis, Ruminococcus gnavus|Aggregatibacter segnis, Ruminococcus lactaris|Aggregatibacter segnis, Ruminococcus obeum|Aggregatibacter segnis, Ruminococcus torques|Aggregatibacter segnis, Selenomonas spuitigena|Aggregatibacter segnis, Shigella boydii|Aggregatibacter segnis, Shigella dysenteriae|Aggregatibacter segnis, Shigella sonnei|Aggregatibacter segnis, Slackia exigua|Aggregatibacter segnis, Solobacterium moorei|Aggregatibacter segnis, Staphylococcus aureus|Aggregatibacter segnis, Staphylococcus epidermidis|Aggregatibacter segnis, Staphylococcus hominis|Aggregatibacter segnis, Staphylococcus saprophyticus|Aggregatibacter segnis, Streptococcus agalactiae|Aggregatibacter segnis, Streptococcus anginosus|Aggregatibacter segnis, Streptococcus australis|Aggregatibacter segnis, Streptococcus bovis|Aggregatibacter segnis, Streptococcus cristatus|Aggregatibacter segnis, Streptococcus dysgalactiae|Aggregatibacter segnis, Streptococcus equinus|Aggregatibacter segnis, Streptococcus gordonii|Aggregatibacter segnis, Streptococcus infantarius|Aggregatibacter segnis, Streptococcus infantis|Aggregatibacter segnis, Streptococcus mitis|Aggregatibacter segnis, Streptococcus mutans|Aggregatibacter segnis, Streptococcus oralis|Aggregatibacter segnis, Streptococcus parasanguinis|Aggregatibacter segnis, Streptococcus peroris|Aggregatibacter segnis, Streptococcus pneumoniae|Aggregatibacter segnis, Streptococcus salivarius|Aggregatibacter segnis, Streptococcus sanguinis|Aggregatibacter segnis, Streptococcus thermophilus|Aggregatibacter segnis, Streptococcus vestibularis|Aggregatibacter segnis, Subdoligranulum variabile|Aggregatibacter segnis, Succinatimonas hippei|Aggregatibacter segnis, Sutterella wadsworthensis|Aggregatibacter segnis, Tropheryma whippelii|Aggregatibacter segnis, Veillonella atypica|Aggregatibacter segnis, Veillonella dispar|Aggregatibacter segnis, Veillonella parvula|Aggregatibacter segnis, Victivallis vadensis|Akkermansia muciniphila, Akkermansia muciniphila, Alistipes putredinis|Akkermansia muciniphila, Alistipes shahii|Akkermansia muciniphila, Anaerococcus hydrogenalis|Akkermansia muciniphila, Anaerococcus lactolyticus|Akkermansia muciniphila, Anaerococcus vaginalis|Akkermansia muciniphila, Anaerostipes caccae|Akkermansia muciniphila, Anaerotruncus colihominis|Akkermansia muciniphila, Atopobium parvulum|Akkermansia muciniphila, Atopobium rimae|Akkermansia muciniphila, Atopobium vaginae|Akkermansia muciniphila, Bacteroides caccae|Akkermansia muciniphila, Bacteroides cellulosilyticus|Akkermansia muciniphila, Bacteroides coprocola|Akkermansia muciniphila, Bacteroides coprophilus|Akkermansia muciniphila, Bacteroides dorei|Akkermansia muciniphila, Bacteroides eggertii|Akkermansia muciniphila, Bacteroides finegoldii|Akkermansia muciniphila, Bacteroides fragilis|Akkermansia muciniphila, Bacteroides helgones|Akkermansia muciniphila, Bacteroides intestinalis|Akkermansia muciniphila, Bacteroides ovatus|Akkermansia muciniphila, Bacteroides pectinophilus|Akkermansia muciniphila, Bacteroides plebeius|Akkermansia muciniphila, Bacteroides salanitronis|Akkermansia muciniphila, Bacteroides sp. 1_1_6|Akkermansia muciniphila, Bacteroides sp. 3_1_23|Akkermansia muciniphila, Bacteroides stercoris|Akkermansia muciniphila, Bacteroides thetaiotaomicron|Akkermansia muciniphila, Bacteroides uniformis|Akkermansia muciniphila, Bacteroides vulgatus|Akkermansia muciniphila, Bacteroides xylanisolvens|Akkermansia muciniphila, Bifidobacterium adolescentis|Akkermansia muciniphila, Bifidobacterium angulatum|Akkermansia muciniphila, Bifidobacterium animalis|Akkermansia muciniphila, Bifidobacterium bifidum|Akkermansia muciniphila, Bifidobacterium breve|Akkermansia muciniphila, Bifidobacterium catenulatum|Akkermansia muciniphila, Bifidobacterium dentium|Akkermansia muciniphila, Bifidobacterium infantis|Akkermansia muciniphila, Bifidobacterium longum|Akkermansia muciniphila, Bifidobacterium pseudocatenulatum|Akkermansia muciniphila, Bilophila wadsworthii|Akkermansia muciniphila, Blautia hansenii|Akkermansia muciniphila, Blautia hydrogenotrophica|Akkermansia muciniphila, Blautia producta|Akkermansia muciniphila, Blautia schinkii|Akkermansia muciniphila, Brevibacterium linens|Akkermansia muciniphila, Brucella ceti|Akkermansia muciniphila, Brucella suis|Akkermansia

muciniphila, Bulleidia extracta|AkKermansia muciniphila, Butyrivibrio crossotus|AkKermansia muciniphila, Campylobacter concisus|AkKermansia muciniphila, Campylobacter curvus|AkKermansia muciniphila, Campylobacter gracilis|AkKermansia muciniphila, Campylobacter hominis|AkKermansia muciniphila, Capnocytophaga ochracea|AkKermansia muciniphila, Cardiobacterium hominis|AkKermansia muciniphila, Catenibacterium mitsuokai|AkKermansia muciniphila, Catonella morbi|AkKermansia muciniphila, Citrobacter koseri|AkKermansia muciniphila, Clostridium asparagiforme|AkKermansia muciniphila, Clostridium bartlettii|AkKermansia muciniphila, Clostridium bolteae|AkKermansia muciniphila, Clostridium botulinum|AkKermansia muciniphila, Clostridium butyricum|AkKermansia muciniphila, Clostridium difficile|AkKermansia muciniphila, Clostridium disporicum|AkKermansia muciniphila, Clostridium hathewayi|AkKermansia muciniphila, Clostridium hylemonae|AkKermansia muciniphila, Clostridium innocuum|AkKermansia muciniphila, Clostridium leptum|AkKermansia muciniphila, Clostridium mayombeii|AkKermansia muciniphila, Clostridium methylpentosum|AkKermansia muciniphila, Clostridium nexile|AkKermansia muciniphila, Clostridium orbiscindens|AkKermansia muciniphila, Clostridium perfringens|AkKermansia muciniphila, Clostridium saccharolyticum|AkKermansia muciniphila, Clostridium scindens|AkKermansia muciniphila, Clostridium symbiosum|AkKermansia muciniphila, Clostridium tertium|AkKermansia muciniphila, Collinsella aerofaciens|AkKermansia muciniphila, Collinsella intestinalis|AkKermansia muciniphila, Collinsella stercoris|AkKermansia muciniphila, Coprobacillus sp. D7|AkKermansia muciniphila, Coprococcus catus|AkKermansia muciniphila, Coprococcus comes|AkKermansia muciniphila, Coprococcus eutactus|AkKermansia muciniphila, Corynebacterium aurimucosum|AkKermansia muciniphila, Corynebacterium matruchothii|AkKermansia muciniphila, Cryptobacterium curtum|AkKermansia muciniphila, Desulfovibrio desulfuricans|AkKermansia muciniphila, Desulfovibrio piger|AkKermansia muciniphila, Dialister invisus|AkKermansia muciniphila, Dialister microaerophilus|AkKermansia muciniphila, Dorea formicigenerans|AkKermansia muciniphila, Dorea longicatena|AkKermansia muciniphila, Eggertella lenta|AkKermansia muciniphila, Eikenella corrodens|AkKermansia muciniphila, Enterobacter cancerogenus|AkKermansia muciniphila, Enterobacter cloacae|AkKermansia muciniphila, Enterococcus faecalis|AkKermansia muciniphila, Enterococcus faecium|AkKermansia muciniphila, Enterococcus gallinarum|AkKermansia muciniphila, Erysipelotrichaceae bacterium 3_1_53|AkKermansia muciniphila, Escherichia coli|AkKermansia muciniphila, Escherichia fergusonii|AkKermansia muciniphila, Ethanoligenes harbinense|AkKermansia muciniphila, Eubacterium cellulosolvens|AkKermansia muciniphila, Eubacterium eligens|AkKermansia muciniphila, Eubacterium hallii|AkKermansia muciniphila, Eubacterium limosum|AkKermansia muciniphila, Eubacterium prausnitzii|AkKermansia muciniphila, Eubacterium rectale|AkKermansia muciniphila, Eubacterium siraeum|AkKermansia muciniphila, Eubacterium ventriosum|AkKermansia muciniphila, Faecalibacterium prausnitzii|AkKermansia muciniphila, Finegoldia magna|AkKermansia muciniphila, Fusobacterium gonidiformans|AkKermansia muciniphila, Fusobacterium mortiferum|AkKermansia muciniphila, Fusobacterium nucleatum|AkKermansia muciniphila, Fusobacterium varium|AkKermansia muciniphila, Gardnerella vaginalis|AkKermansia muciniphila, Gemella haemolysans|AkKermansia muciniphila, Gemella morbillorum|AkKermansia muciniphila, Gordonibacter pamelaeae|AkKermansia muciniphila, Granulicatella adiacens|AkKermansia muciniphila, Granulicatella elegans|AkKermansia muciniphila, Haemophilus influenzae|AkKermansia muciniphila, Haemophilus parainfluenzae|AkKermansia muciniphila, Helicobacter pylori|AkKermansia muciniphila, Holdemania filiformis|AkKermansia muciniphila, Kingella oralis|AkKermansia muciniphila, Klebsiella pneumoniae|AkKermansia muciniphila, Klebsiella varicola|AkKermansia muciniphila, Lachnospiraceae bacterium 5_1_57FAA|AkKermansia muciniphila, Lactobacillus acidophilus|AkKermansia muciniphila, Lactobacillus amylovorus|AkKermansia muciniphila, Lactobacillus brevis|AkKermansia muciniphila, Lactobacillus casei|AkKermansia muciniphila, Lactobacillus crispatus|AkKermansia muciniphila, Lactobacillus delbrueckii|AkKermansia muciniphila, Lactobacillus fermentum|AkKermansia muciniphila, Lactobacillus gasseri|AkKermansia muciniphila, Lactobacillus iners|AkKermansia muciniphila, Lactobacillus jensenii|AkKermansia muciniphila, Lactobacillus johnsonii|AkKermansia muciniphila, Lactobacillus paracasei|AkKermansia muciniphila, Lactobacillus plantarum|AkKermansia muciniphila, Lactobacillus reuteri|AkKermansia muciniphila, Lactobacillus rhamnosus|AkKermansia muciniphila, Lactobacillus ruminis|AkKermansia muciniphila, Lactobacillus sakei|AkKermansia muciniphila, Lactobacillus salivarius|AkKermansia muciniphila, Lactococcus lactis|AkKermansia muciniphila, Lautropia mirabilis|AkKermansia muciniphila, Leuconostoc citreum|AkKermansia muciniphila, Leuconostoc gasiconitum|AkKermansia muciniphila, Leuconostoc mesenteroides|AkKermansia muciniphila, Listeria monocytogenes|AkKermansia muciniphila, Marvinbryantia formatexigenis|AkKermansia muciniphila, Megamonas hypermegale|AkKermansia muciniphila, Megasphaera micronuciformis|AkKermansia muciniphila, Methanobrevibacter smithii|AkKermansia muciniphila, Methanospaera stadmanae|AkKermansia muciniphila, Methylobacterium radiotolerans|AkKermansia muciniphila, Mitsuokella multacida|AkKermansia muciniphila, Mobiluncus curtisii|AkKermansia muciniphila, Mycoplasma hominis|AkKermansia muciniphila, Neisseria mucosa|AkKermansia muciniphila, Odoribacter splanchnicus|AkKermansia muciniphila, Olsenella ulii|AkKermansia muciniphila, Oribacterium sinus|AkKermansia muciniphila, Oxalobacter formigenes|AkKermansia muciniphila, Parabacteroides distasonis|AkKermansia muciniphila, Parabacteroides johnsonii|AkKermansia muciniphila, Parabacteroides merdae|AkKermansia muciniphila, Parvimonas micra|AkKermansia muciniphila, Pediococcus acidilactici|AkKermansia muciniphila, Pediococcus pentosaceus|AkKermansia muciniphila, Peptoniphilus duerdenii|AkKermansia muciniphila, Peptoniphilus harei|AkKermansia muciniphila, Peptoniphilus lacrimalis|AkKermansia muciniphila, Peptostreptococcus anaerobius|AkKermansia muciniphila, Peptostreptococcus stomatis|AkKermansia muciniphila, Porphyromonas asaccharolytica|AkKermansia muciniphila, Porphyromonas uenonis|AkKermansia muciniphila, Prevotella amnii|AkKermansia muciniphila, Prevotella bergensis|AkKermansia muciniphila, Prevotella bivia|AkKermansia muciniphila, Prevotella buccae|AkKermansia muciniphila, Prevotella buccalis|AkKermansia muciniphila, Prevotella copri|AkKermansia muciniphila, Prevotella disiens|AkKermansia muciniphila, Prevotella melaninogenica|AkKermansia muciniphila, Prevotella multiformis|AkKermansia muciniphila, Prevotella oralis|AkKermansia muciniphila, Prevotella oris|AkKermansia muciniphila, Prevotella salivae|AkKermansia muciniphila, Prevotella timonensis|AkKermansia muciniphila, Propionibacterium acnes|AkKermansia muciniphila, Propionibacterium freudenreichii|AkKermansia muciniphila, Proteus mirabilis|AkKermansia muciniphila, Proteus penneri|AkKermansia muciniphila, Pseudoflavonifractor capillosus|AkKermansia muciniphila, Pseudomonas aeruginosa|AkKermansia muciniphila, Pseudomonas fluorescens|AkKermansia muciniphila, Pseudomonas putida|AkKermansia muciniphila, Pseudoramibacter alactolyticus|AkKermansia muciniphila, Pyramidobacter pisci|AkKermansia muciniphila, Rhodopsudomonas palustris|AkKermansia muciniphila, Roseburia intestinalis|AkKermansia muciniphila, Roseburia inulinivorans|AkKermansia muciniphila, Rothia dentocariosa|AkKermansia muciniphila, Rothia mucilaginosa|AkKermansia muciniphila, Ruminococcus albus|AkKermansia muciniphila, Ruminococcus bromii|AkKermansia muciniphila, Ruminococcus gnavus|AkKermansia muciniphila, Ruminococcus lactaris|AkKermansia muciniphila, Ruminococcus obeum|AkKermansia muciniphila, Ruminococcus torques|AkKermansia muciniphila, Selenomonas putigena|AkKermansia muciniphila, Shigella boydii|AkKermansia muciniphila, Shigella dysenteriae|AkKermansia muciniphila, Shigella sonnei|AkKermansia muciniphila, Slackia exigua|AkKermansia muciniphila, Solobacterium moorei|AkKermansia muciniphila, Staphylococcus aureus|AkKermansia muciniphila, Staphylococcus epidermidis|AkKermansia muciniphila, Staphylococcus hominis|AkKermansia muciniphila, Staphylococcus saprophyticus|AkKermansia muciniphila, Staphylococcus warneri|AkKermansia muciniphila, Streptococcus agalactiae|AkKermansia muciniphila, Streptococcus anginosus|AkKermansia muciniphila, Streptococcus australis|AkKermansia muciniphila, Streptococcus bovis|AkKermansia muciniphila, Streptococcus cristatus|AkKermansia muciniphila, Streptococcus dysgalactiae|AkKermansia muciniphila, Streptococcus equinus|AkKermansia muciniphila, Streptococcus gordonii|AkKermansia muciniphila, Streptococcus infantarius|AkKermansia muciniphila, Streptococcus infantis|AkKermansia muciniphila, Streptococcus mitis|AkKermansia muciniphila, Streptococcus mutans|AkKermansia muciniphila, Streptococcus oralis|AkKermansia muciniphila, Streptococcus parasanguinis|AkKermansia muciniphila, Streptococcus peroris|AkKermansia muciniphila, Streptococcus pneumoniae|AkKermansia muciniphila, Streptococcus salivarius|AkKermansia muciniphila, Streptococcus sanguinis|AkKermansia muciniphila, Streptococcus thermophilus|AkKermansia muciniphila, Streptococcus vestibularis|AkKermansia muciniphila, Subdoligranulum variabile|AkKermansia muciniphila, Succinatimonas hippei|AkKermansia muciniphila, Sutterella wadsworthensis|AkKermansia muciniphila, Tropheryma whipplei|AkKermansia muciniphila, Veillonella atypica|AkKermansia muciniphila, Veillonella dispar|AkKermansia muciniphila, Veillonella parvula|AkKermansia muciniphila, Victivallis vadensis|AkKermansia muciniphila, Alistipes putredinis, Alistipes putredinis, Alistipes putredinis, Alistipes shahii|Alistipes putredinis, Anaerococcus hydrogenalis|Alistipes putredinis, Anaerococcus lactolyticus|Alistipes putredinis, Anaerococcus vaginalis|Alistipes putredinis, Anaerostipes caccae|Alistipes putredinis, Anaerotruncus colihominis|Alistipes putredinis, Atopobium parvulum|Alistipes putredinis, Atopobium rimae|Alistipes putredinis, Atopobium vaginae|Alistipes putredinis, Bacteroides caccae|Alistipes putredinis, Bacteroides cellulosilyticus|Alistipes putredinis, Bacteroides coprocola|Alistipes putredinis, Bacteroides coprophilus|Alistipes putredinis, Bacteroides dorei|Alistipes putredinis, Bacteroides eggertii|Alistipes putredinis, Bacteroides finegoldii|Alistipes putredinis, Bacteroides fragilis|Alistipes putredinis, Bacteroides helgonesis|Alistipes putredinis, Bacteroides intestinalis|Alistipes putredinis, Bacteroides ovatus|Alistipes putredinis, Bacteroides pectinophilus|Alistipes putredinis, Bacteroides plebeius|Alistipes putredinis, Bacteroides salanitronis|Alistipes putredinis, Bacteroides sp. 1_1_6|Alistipes putredinis, Bacteroides sp. 3_1_23|Alistipes putredinis, Bacteroides stercoris|Alistipes putredinis, Bacteroides thetaiotaomicron|Alistipes putredinis, Bacteroides uniformis|Alistipes putredinis, Bacteroides vulgatus|Alistipes putredinis, Bacteroides xylinolvens|Alistipes putredinis, Bifidobacterium adolescentis|Alistipes putredinis, Bifidobacterium angulatum|Alistipes putredinis, Bifidobacterium animalis|Alistipes putredinis, Bifidobacterium bifidum|Alistipes putredinis, Bifidobacterium breve|Alistipes putredinis, Bifidobacterium catenulatum|Alistipes putredinis, Bifidobacterium dentium|Alistipes putredinis, Bifidobacterium infantis|Alistipes putredinis, Bifidobacterium longum|Alistipes putredinis, Bifidobacterium pseudocatenulatum|Alistipes putredinis, Bilophia wadsworthii|Alistipes putredinis, Blautia hansenii|Alistipes putredinis, Blautia hydrogenotrophica|Alistipes putredinis, Blautia producta|Alistipes putredinis, Blautia schinkii|Alistipes putredinis, Brevibacterium linum|Alistipes putredinis, Brucella ceti|Alistipes putredinis, Brucella suis|Alistipes putredinis, Bulleidia extracta|Alistipes putredinis, Butyrivibrio crossotus|Alistipes putredinis, Campylobacter concisus|Alistipes putredinis, Campylobacter curvus|Alistipes putredinis, Campylobacter gracilis|Alistipes putredinis, Campylobacter hominis|Alistipes putredinis, Capnocytophaga ochracea|Alistipes putredinis, Cardiobacterium hominis|Alistipes putredinis, Catenibacterium mitsuokai|Alistipes putredinis, Catonella morbi|Alistipes putredinis, Citrobacter koseri|Alistipes putredinis, Clostridium asparagiforme|Alistipes putredinis, Clostridium bartlettii|Alistipes putredinis, Clostridium bolteae|Alistipes putredinis, Clostridium botulinum|Alistipes putredinis, Clostridium butyricum|Alistipes putredinis, Clostridium difficile|Alistipes putredinis, Clostridium disporicum|Alistipes putredinis, Clostridium hathewayi|Alistipes putredinis, Clostridium hylemonae|Alistipes putredinis, Clostridium innocuum|Alistipes putredinis, Clostridium leptum|Alistipes putredinis, Clostridium mayombeii|Alistipes putredinis, Clostridium methylpentosum|Alistipes putredinis, Clostridium nexile|Alistipes putredinis, Clostridium orbiscindens|Alistipes putredinis, Clostridium perfringens|Alistipes putredinis, Clostridium saccharolyticum|Alistipes putredinis, Clostridium scindens|Alistipes putredinis, Clostridium symbiosum|Alistipes putredinis, Clostridium tertium|Alistipes putredinis, Collinsella aerofaciens|Alistipes putredinis, Collinsella intestinalis|Alistipes putredinis, Collinsella stercoris|Alistipes putredinis, Coprobacillus sp. D7|Alistipes putredinis, Coprococcus catus|Alistipes putredinis, Coprococcus comes|Alistipes putredinis, Coprococcus eutactus|Alistipes putredinis, Corynebacterium aurimucosum|Alistipes putredinis, Corynebacterium matruchothii|Alistipes putredinis, Cryptobacterium curtum|Alistipes putredinis, Desulfovibrio desulfuricans|Alistipes putredinis, Desulfovibrio piger|Alistipes putredinis, Dialister invisus|Alistipes putredinis, Dialister microaerophilus|Alistipes putredinis, Dorea formicigenerans|Alistipes putredinis, Dorea longicatena|Alistipes putredinis, Eggertella lenta|Alistipes putredinis, Eikenella corrodens|Alistipes putredinis, Enterobacter cancerogenus|Alistipes putredinis, Enterobacter cloacae|Alistipes putredinis, Enterococcus faecalis|Alistipes putredinis, Enterococcus faecium|Alistipes putredinis, Enterococcus gallinarum|Alistipes putredinis, Erysipelotrichaceae bacterium 3_1_53|Alistipes putredinis, Escherichia coli|Alistipes putredinis, Escherichia fergusonii|Alistipes putredinis, Ethanoligenes harbinense|Alistipes putredinis, Eubacterium cellulosolvens|Alistipes putredinis, Eubacterium eligens|Alistipes putredinis, Eubacterium hallii|Alistipes putredinis, Eubacterium limosum|Alistipes putredinis, Eubacterium rectale|Alistipes putredinis, Eubacterium siraeum|Alistipes putredinis, Eubacterium ventriosum|Alistipes putredinis, Faecalibacterium prausnitzii|Alistipes putredinis, Finegoldia magna|Alistipes putredinis, Fusobacterium gonidiformans|Alistipes putredinis, Fusobacterium mortiferum|Alistipes putredinis, Fusobacterium nucleatum|Alistipes putredinis, Fusobacterium varium|Alistipes putredinis, Gardnerella vaginalis|Alistipes putredinis, Gemella haemolysans|Alistipes putredinis, Gemella morbillorum|Alistipes putredinis, Gordonibacter pamelaeae|Alistipes putredinis, Granulicatella adiacens|Alistipes putredinis, Granulicatella elegans|Alistipes putredinis, Haemophilus influenzae|Alistipes putredinis, Haemophilus parainfluenzae|Alistipes putredinis, Helicobacter pylori|Alistipes putredinis, Holdemania filiformis|Alistipes putredinis, Kingella oralis|Alistipes putredinis, Klebsiella pneumoniae|Alistipes putredinis, Klebsiella varicola|Alistipes putredinis, Lachnospiraceae bacterium 5_1_57FAA|Alistipes putredinis, Lactobacillus acidophilus|Alistipes putredinis, Lactobacillus amylovorus|Alistipes putredinis, Lactobacillus brevis|Alistipes putredinis, Lactobacillus casei|Alistipes putredinis, Lactobacillus crispatus|Alistipes putredinis, Lactobacillus delbrueckii|Alistipes putredinis, Lactobacillus fermentum|Alistipes putredinis, Lactobacillus gasseri|Alistipes putredinis, Lactobacillus iners|Alistipes putredinis, Lactobacillus jensenii|Alistipes putredinis, Lactobacillus johnsonii|Alistipes putredinis, Lactobacillus paracasei|Alistipes putredinis, Lactobacillus plantarum|Alistipes putredinis, Lactobacillus reuteri|Alistipes putredinis, Lactobacillus rhamnosus|Alistipes putredinis, Lactobacillus ruminis|Alistipes putredinis, Lactobacillus sakei|Alistipes putredinis, Lactobacillus salivarius|Alistipes putredinis, Lactococcus lactis|Alistipes putredinis, Lautropia mirabilis|Alistipes putredinis, Leuconostoc citreum|Alistipes putredinis, Leuconostoc gasiconitum|Alistipes putredinis, Leuconostoc mesenteroides|Alistipes putredinis, Listeria monocytogenes|Alistipes putredinis, Marvinbryantia formatexigenis|Alistipes putredinis, Megamonas hypermegale|Alistipes putredinis, Megasphaera micronuciformis|Alistipes putredinis, Methanobrevibacter smithii|Alistipes putredinis, Methanospaera stadmanae|Alistipes putredinis, Methylobacterium radiotolerans|Alistipes putredinis, Mitsuokella multacida|Alistipes putredinis, Mobiluncus curtisii|Alistipes putredinis, Mycoplasma hominis|Alistipes putredinis, Neisseria mucosa|Alistipes putredinis, Odoribacter splanchnicus|Alistipes putredinis, Olsenella ulii|Alistipes putredinis, Oribacterium sinus|Alistipes putredinis, Oxalobacter formigenes|Alistipes putredinis, Parabacteroides distasonis|Alistipes putredinis, Parabacteroides johnsonii|Alistipes putredinis, Parabacteroides merdae|Alistipes putredinis, Parvimonas micra|Alistipes putredinis, Pediococcus acidilactici|Alistipes putredinis, Pediococcus pentosaceus|Alistipes putredinis, Peptoniphilus duerdenii|Alistipes putredinis, Peptoniphilus harei|Alistipes putredinis, Peptoniphilus lacrimalis|Alistipes putredinis, Peptostreptococcus anaerobius|Alistipes putredinis, Peptostreptococcus stomatis|Alistipes putredinis, Porphyromonas asaccharolytica|Alistipes putredinis, Porphyromonas uenonis|Alistipes putredinis, Prevotella amnii|Alistipes putredinis, Prevotella bergensis|Alistipes putredinis, Prevotella bivia|Alistipes putredinis, Prevotella buccae|Alistipes putredinis, Prevotella buccalis|Alistipes putredinis, Prevotella copri|Alistipes putredinis, Prevotella disiens|Alistipes putredinis, Prevotella melaninogenica|Alistipes putredinis, Prevotella multiformis|Alistipes putredinis, Prevotella oralis|Alistipes putredinis, Prevotella oris|Alistipes putredinis, Prevotella salivae|Alistipes putredinis, Prevotella timonensis|Alistipes putredinis, Propionibacterium acnes|Alistipes putredinis, Propionibacterium freudenreichii|Alistipes putredinis, Proteus mirabilis|Alistipes putredinis, Proteus penneri|Alistipes putredinis, Pseudoflavonifractor capillosus|Alistipes putredinis, Pseudomonas aeruginosa|Alistipes putredinis, Pseudomonas fluorescens|Alistipes putredinis, Pseudomonas putida|Alistipes putredinis, Pseudoramibacter alactolyticus|Alistipes putredinis, Pyramidobacter pisci|Alistipes putredinis, Rhodopsudomonas palustris|Alistipes

108

hydrogenalis, *Lactobacillus plantarum*/Anaeococcus hydrogenalis, *Lactobacillus reuteri*/Anaeococcus hydrogenalis, *Lactobacillus rhamnosus*/Anaeococcus hydrogenalis, *Lactobacillus ruminis*/Anaeococcus hydrogenalis, *Lactobacillus sakei*/Anaeococcus hydrogenalis, *Lactobacillus salivarius*/Anaeococcus hydrogenalis, *Lactococcus lactis*/Anaeococcus hydrogenalis, *Lautropia mirabilis*/Anaeococcus hydrogenalis, *Leuconostoc citreum*/Anaeococcus hydrogenalis, *Leuconostoc gasicomitatum*/Anaeococcus hydrogenalis, *Leuconostoc mesenteroides*/Anaeococcus hydrogenalis, *Listeria monocytogenes*/Anaeococcus hydrogenalis, *Marvinbryantia formatexigens*/Anaeococcus hydrogenalis, *Megamonas hypermegale*/Anaeococcus hydrogenalis, *Megasphaera micronuciformis*/Anaeococcus hydrogenalis, *Methanobrevibacter smithii*/Anaeococcus hydrogenalis, *Methanospaera stadmanae*/Anaeococcus hydrogenalis, *Methylobacterium radiotolerans*/Anaeococcus hydrogenalis, *Mitsuokella multacida*/Anaeococcus hydrogenalis, *Mobiluncus curtisii*/Anaeococcus hydrogenalis, *Mycoplasma hominis*/Anaeococcus hydrogenalis, *Neisseria mucosa*/Anaeococcus hydrogenalis, *Odoribacter splanchnicus*/Anaeococcus hydrogenalis, *Olsenella ulii*/Anaeococcus hydrogenalis, *Oribacterium sinus*/Anaeococcus hydrogenalis, *Oxalobacter formigenes*/Anaeococcus hydrogenalis, *Parabacteroides distans*/Anaeococcus hydrogenalis, *Parabacteroides johnsonii*/Anaeococcus hydrogenalis, *Parabacteroides merdae*/Anaeococcus hydrogenalis, *Parvimonas micra*/Anaeococcus hydrogenalis, *Pediococcus acidilactici*/Anaeococcus hydrogenalis, *Pediococcus pentosaceus*/Anaeococcus hydrogenalis, *Peptoniphilus duerdenii*/Anaeococcus hydrogenalis, *Peptoniphilus harei*/Anaeococcus hydrogenalis, *Peptoniphilus lacrimalis*/Anaeococcus hydrogenalis, *Peptostreptococcus anaerobius*/Anaeococcus hydrogenalis, *Peptostreptococcus stomatis*/Anaeococcus hydrogenalis, *Porphyromonas asaccharolytica*/Anaeococcus hydrogenalis, *Porphyromonas uenonis*/Anaeococcus hydrogenalis, *Prevotella amnii*/Anaeococcus hydrogenalis, *Prevotella bergensis*/Anaeococcus hydrogenalis, *Prevotella bivia*/Anaeococcus hydrogenalis, *Prevotella buccae*/Anaeococcus hydrogenalis, *Prevotella buccalis*/Anaeococcus hydrogenalis, *Prevotella copri*/Anaeococcus hydrogenalis, *Prevotella disiens*/Anaeococcus hydrogenalis, *Prevotella melaninogenica*/Anaeococcus hydrogenalis, *Prevotella multiformis*/Anaeococcus hydrogenalis, *Prevotella oralis*/Anaeococcus hydrogenalis, *Prevotella oris*/Anaeococcus hydrogenalis, *Prevotella salivae*/Anaeococcus hydrogenalis, *Prevotella timonensis*/Anaeococcus hydrogenalis, *Propionibacterium acnes*/Anaeococcus hydrogenalis, *Propionibacterium freudenreichii*/Anaeococcus hydrogenalis, *Proteus mirabilis*/Anaeococcus hydrogenalis, *Proteus penneri*/Anaeococcus hydrogenalis, *Pseudoflavonifractor capillosus*/Anaeococcus hydrogenalis, *Pseudomonas aeruginosa*/Anaeococcus hydrogenalis, *Pseudomonas fluorescens*/Anaeococcus hydrogenalis, *Pseudomonas putida*/Anaeococcus hydrogenalis, *Pseudoramibacter alactolyticus*/Anaeococcus hydrogenalis, *Pyramidobacter piscicols*/Anaeococcus hydrogenalis, *Rhodopseudomonas palustris*/Anaeococcus hydrogenalis, *Roseburia intestinalis*/Anaeococcus hydrogenalis, *Roseburia inulinivorans*/Anaeococcus hydrogenalis, *Rothia dentocariosa*/Anaeococcus hydrogenalis, *Rothia mucilaginosa*/Anaeococcus hydrogenalis, *Ruminococcus albus*/Anaeococcus hydrogenalis, *Ruminococcus bromii*/Anaeococcus hydrogenalis, *Ruminococcus gnavus*/Anaeococcus hydrogenalis, *Ruminococcus lactaris*/Anaeococcus hydrogenalis, *Ruminococcus obeum*/Anaeococcus hydrogenalis, *Ruminococcus torques*/Anaeococcus hydrogenalis, *Selenomonas sputigena*/Anaeococcus hydrogenalis, *Shigella boydii*/Anaeococcus hydrogenalis, *Shigella dysenteriae*/Anaeococcus hydrogenalis, *Shigella sonnei*/Anaeococcus hydrogenalis, *Slackia exigua*/Anaeococcus hydrogenalis, *Solobacterium moorei*/Anaeococcus hydrogenalis, *Staphylococcus aureus*/Anaeococcus hydrogenalis, *Staphylococcus epidermidis*/Anaeococcus hydrogenalis, *Staphylococcus hominis*/Anaeococcus hydrogenalis, *Staphylococcus saprophyticus*/Anaeococcus hydrogenalis, *Staphylococcus warneri*/Anaeococcus hydrogenalis, *Streptococcus agalactiae*/Anaeococcus hydrogenalis, *Streptococcus anginosus*/Anaeococcus hydrogenalis, *Streptococcus australis*/Anaeococcus hydrogenalis, *Streptococcus bovis*/Anaeococcus hydrogenalis, *Streptococcus cristatus*/Anaeococcus hydrogenalis, *Streptococcus dysgalactiae*/Anaeococcus hydrogenalis, *Streptococcus equinus*/Anaeococcus hydrogenalis, *Streptococcus gordonii*/Anaeococcus hydrogenalis, *Streptococcus infantarius*/Anaeococcus hydrogenalis, *Streptococcus infantis*/Anaeococcus hydrogenalis, *Streptococcus mitis*/Anaeococcus hydrogenalis, *Streptococcus mutans*/Anaeococcus hydrogenalis, *Streptococcus oralis*/Anaeococcus hydrogenalis, *Streptococcus peroris*/Anaeococcus hydrogenalis, *Streptococcus pneumoniae*/Anaeococcus hydrogenalis, *Streptococcus salivarius*/Anaeococcus hydrogenalis, *Streptococcus sanguinis*/Anaeococcus hydrogenalis, *Streptococcus thermophilus*/Anaeococcus hydrogenalis, *Streptococcus vestibularis*/Anaeococcus hydrogenalis, *Subdoligranulum variable*/Anaeococcus hydrogenalis, *Succinatimonas hippei*/Anaeococcus hydrogenalis, *Sutterella wadsworthensis*/Anaeococcus hydrogenalis, *Tropheryma whippelii*/Anaeococcus hydrogenalis, *Veillonella atypica*/Anaeococcus hydrogenalis, *Veillonella dispar*/Anaeococcus hydrogenalis, *Veillonella parvula*/Anaeococcus hydrogenalis, *Victivallis vadensis*/Anaeococcus lactolyticus, *Anaeococcus lactolyticus*/Anaeococcus vaginalis, *Anaeococcus vaginalis*/Anaeococcus vaginalis, *Anaerostipes caccae*/Anaeococcus lactolyticus, *Anaerotruncus colihominis*/Anaeococcus lactolyticus, *Atopobium parvulum*/Anaeococcus lactolyticus, *Atopobium rimae*/Anaeococcus lactolyticus, *Atopobium vaginae*/Anaeococcus lactolyticus, *Bacteroides caccae*/Anaeococcus lactolyticus, *Bacteroides cellulosyticus*/Anaeococcus lactolyticus, *Bacteroides coprococci*/Anaeococcus lactolyticus, *Bacteroides coprophilus*/Anaeococcus lactolyticus, *Bacteroides dorei*/Anaeococcus lactolyticus, *Bacteroides eggerthii*/Anaeococcus lactolyticus, *Bacteroides finegoldii*/Anaeococcus lactolyticus, *Bacteroides fragilis*/Anaeococcus lactolyticus, *Bacteroides helcogenes*/Anaeococcus lactolyticus, *Bacteroides intestinalis*/Anaeococcus lactolyticus, *Bacteroides ovatus*/Anaeococcus lactolyticus, *Bacteroides pectinophilus*/Anaeococcus lactolyticus, *Bacteroides plebeius*/Anaeococcus lactolyticus, *Bacteroides salanitronis*/Anaeococcus lactolyticus, *Bacteroides sp. 1_1_6*/Anaeococcus lactolyticus, *Bacteroides sp. 3_1_23*/Anaeococcus lactolyticus, *Bacteroides stercoris*/Anaeococcus lactolyticus, *Bacteroides thetaiotaomicron*/Anaeococcus lactolyticus, *Bacteroides uniformis*/Anaeococcus lactolyticus, *Bacteroides vulgatus*/Anaeococcus lactolyticus, *Bacteroides xylanilyolens*/Anaeococcus lactolyticus, *Bifidobacterium adolescentis*/Anaeococcus lactolyticus, *Bifidobacterium angulatum*/Anaeococcus lactolyticus, *Bifidobacterium animalis*/Anaeococcus lactolyticus, *Bifidobacterium bifidum*/Anaeococcus lactolyticus, *Bifidobacterium breve*/Anaeococcus lactolyticus, *Bifidobacterium catenulatum*/Anaeococcus lactolyticus, *Bifidobacterium dentium*/Anaeococcus lactolyticus, *Bifidobacterium infantis*/Anaeococcus lactolyticus, *Bifidobacterium longum*/Anaeococcus lactolyticus, *Bifidobacterium pseudocatenulatum*/Anaeococcus lactolyticus, *Bifidobacterium bifidum*/Anaeococcus lactolyticus, *Bifidobacterium bifidum*/Anaeococcus lactolyticus, *Blautia wadsworthii*/Anaeococcus lactolyticus, *Blautia hansenii*/Anaeococcus lactolyticus, *Blautia hydrogenotrophica*/Anaeococcus lactolyticus, *Blautia producta*/Anaeococcus lactolyticus, *Blautia schinkii*/Anaeococcus lactolyticus, *Brevibacterium linens*/Anaeococcus lactolyticus, *Brucella cetii*/Anaeococcus lactolyticus, *Brucella suis*/Anaeococcus lactolyticus, *Bulleidia extracta*/Anaeococcus lactolyticus, *Butyrivibrio crossotus*/Anaeococcus lactolyticus, *Campylobacter concisus*/Anaeococcus lactolyticus, *Campylobacter curvus*/Anaeococcus lactolyticus, *Campylobacter gracilis*/Anaeococcus lactolyticus, *Campylobacter hominis*/Anaeococcus lactolyticus, *Capnocytophaga ochracea*/Anaeococcus lactolyticus, *Cardiobacterium hominis*/Anaeococcus lactolyticus, *Catenibacterium mitsuokai*/Anaeococcus lactolyticus, *Catonella morbi*/Anaeococcus lactolyticus, *Citrobacter koseri*/Anaeococcus lactolyticus, *Clostridium asparagiforme*/Anaeococcus lactolyticus, *Clostridium bartlettii*/Anaeococcus lactolyticus, *Clostridium bolteae*/Anaeococcus lactolyticus, *Clostridium botulinum*/Anaeococcus lactolyticus, *Clostridium butyricum*/Anaeococcus lactolyticus, *Clostridium difficile*/Anaeococcus lactolyticus, *Clostridium sporium*/Anaeococcus lactolyticus, *Clostridium hathewayi*/Anaeococcus lactolyticus, *Clostridium hylemonae*/Anaeococcus lactolyticus, *Clostridium innocuum*/Anaeococcus lactolyticus, *Clostridium leptum*/Anaeococcus lactolyticus, *Clostridium mayombi*/Anaeococcus lactolyticus, *Clostridium methylpentosum*/Anaeococcus lactolyticus, *Clostridium nexile*/Anaeococcus lactolyticus, *Clostridium orbiscindens*/Anaeococcus lactolyticus, *Clostridium perfringens*/Anaeococcus lactolyticus, *Clostridium saccharolyticum*/Anaeococcus lactolyticus, *Clostridium scindens*/Anaeococcus lactolyticus, *Clostridium symbiosum*/Anaeococcus lactolyticus, *Clostridium tertium*/Anaeococcus lactolyticus, *Collinsella aerofaciens*/Anaeococcus lactolyticus, *Collinsella intestinalis*/Anaeococcus lactolyticus, *Collinsella stercoris*/Anaeococcus lactolyticus, *Coprobacillus sp. D7*/Anaeococcus lactolyticus, *Coproccoccus catus*/Anaeococcus lactolyticus, *Coproccoccus comes*/Anaeococcus lactolyticus, *Coproccoccus eutactus*/Anaeococcus lactolyticus, *Corynebacterium aurimucosum*/Anaeococcus lactolyticus, *Corynebacterium matruchotii*/Anaeococcus lactolyticus, *Cryptobacterium curtum*/Anaeococcus lactolyticus, *Desulfovibrio desulfuricans*/Anaeococcus lactolyticus, *Desulfovibrio piger*/Anaeococcus lactolyticus, *Dialister invisus*/Anaeococcus lactolyticus, *Dialister microaerophilus*/Anaeococcus lactolyticus, *Dorea formicigenerans*/Anaeococcus lactolyticus, *Dorea longicatena*/Anaeococcus lactolyticus, *Eggerthella lenta*/Anaeococcus lactolyticus, *Eikenella corrodens*/Anaeococcus lactolyticus, *Enterobacter cancerogenus*/Anaeococcus lactolyticus, *Enterobacter cloacae*/Anaeococcus lactolyticus, *Enterococcus faecalis*/Anaeococcus lactolyticus, *Enterococcus faecium*/Anaeococcus lactolyticus, *Enterococcus gallinarum*/Anaeococcus lactolyticus, *Erysipelotrichaceae bacterium 3_1_53*/Anaeococcus lactolyticus, *Escherichia coli*/Anaeococcus lactolyticus, *Escherichia fergusonii*/Anaeococcus lactolyticus, *Ethanoligenes harbinense*/Anaeococcus lactolyticus, *Eubacterium cellulosilyolens*/Anaeococcus lactolyticus, *Eubacterium eligens*/Anaeococcus lactolyticus, *Eubacterium hallii*/Anaeococcus lactolyticus, *Eubacterium limosum*/Anaeococcus lactolyticus, *Eubacterium rectale*/Anaeococcus lactolyticus, *Eubacterium siraeum*/Anaeococcus lactolyticus, *Eubacterium ventriosum*/Anaeococcus lactolyticus, *Faecalibacterium prausnitzii*/Anaeococcus lactolyticus, *Finegoldia magna*/Anaeococcus lactolyticus, *Fusobacterium gonidiaformans*/Anaeococcus lactolyticus, *Fusobacterium mortiferum*/Anaeococcus lactolyticus, *Fusobacterium nucleatum*/Anaeococcus lactolyticus, *Fusobacterium varium*/Anaeococcus lactolyticus, *Gardnerella vaginalis*/Anaeococcus lactolyticus, *Gemella haemolyticus*/Anaeococcus lactolyticus, *Gemella morbillorum*/Anaeococcus lactolyticus, *Gordonia bacteri*/Anaeococcus lactolyticus, *Granulicatella adiacens*/Anaeococcus lactolyticus, *Granulicatella elegans*/Anaeococcus lactolyticus, *Haemophilus influenzae*/Anaeococcus lactolyticus, *Haemophilus parainfluenzae*/Anaeococcus lactolyticus, *Helicobacter pylori*/Anaeococcus lactolyticus, *Helicobacter pylori*/Anaeococcus lactolyticus, *Holdemania filiformis*/Anaeococcus lactolyticus, *Kingella oralis*/Anaeococcus lactolyticus, *Klebsiella pneumoniae*/Anaeococcus lactolyticus, *Klebsiella variicola*/Anaeococcus lactolyticus, *Lachnospiraceae bacterium 5_1_57FAA*/Anaeococcus lactolyticus, *Lactobacillus acidophilus*/Anaeococcus lactolyticus, *Lactobacillus amylovorus*/Anaeococcus lactolyticus, *Lactobacillus brevis*/Anaeococcus lactolyticus, *Lactobacillus casei*/Anaeococcus lactolyticus, *Lactobacillus crispatus*/Anaeococcus lactolyticus, *Lactobacillus delbrueckii*/Anaeococcus lactolyticus, *Lactobacillus fermentum*/Anaeococcus lactolyticus, *Lactobacillus gasseri*/Anaeococcus lactolyticus, *Lactobacillus iners*/Anaeococcus lactolyticus, *Lactobacillus jensenii*/Anaeococcus lactolyticus, *Lactobacillus johnsonii*/Anaeococcus lactolyticus, *Lactobacillus paracasei*/Anaeococcus lactolyticus, *Lactobacillus plantarum*/Anaeococcus lactolyticus, *Lactobacillus reuteri*/Anaeococcus lactolyticus, *Lactobacillus rhamnosus*/Anaeococcus lactolyticus, *Lactobacillus ruminis*/Anaeococcus lactolyticus, *Lactobacillus sakei*/Anaeococcus lactolyticus, *Lactobacillus salivarius*/Anaeococcus lactolyticus, *Lactococcus lactis*/Anaeococcus lactolyticus, *Lautropia mirabilis*/Anaeococcus lactolyticus, *Leuconostoc citreum*/Anaeococcus lactolyticus, *Leuconostoc gasicomitatum*/Anaeococcus lactolyticus, *Leuconostoc mesenteroides*/Anaeococcus lactolyticus, *Listeria monocytogenes*/Anaeococcus lactolyticus, *Marvinbryantia formatexigens*/Anaeococcus lactolyticus, *Megamonas hypermegale*/Anaeococcus lactolyticus, *Megasphaera micronuciformis*/Anaeococcus lactolyticus, *Methanobrevibacter smithii*/Anaeococcus lactolyticus, *Methanospaera stadmanae*/Anaeococcus lactolyticus, *Methylobacterium radiotolerans*/Anaeococcus lactolyticus, *Mitsuokella multacida*/Anaeococcus lactolyticus, *Mobiluncus curtisii*/Anaeococcus lactolyticus, *Mycoplasma hominis*/Anaeococcus lactolyticus, *Neisseria mucosa*/Anaeococcus lactolyticus, *Odoribacter splanchnicus*/Anaeococcus lactolyticus, *Parabacteroides johnsonii*/Anaeococcus lactolyticus, *Parabacteroides merdae*/Anaeococcus lactolyticus, *Parvimonas micra*/Anaeococcus lactolyticus, *Pediococcus acidilactici*/Anaeococcus lactolyticus, *Pediococcus pentosaceus*/Anaeococcus lactolyticus, *Peptoniphilus duerdenii*/Anaeococcus lactolyticus, *Peptoniphilus harei*/Anaeococcus lactolyticus, *Peptoniphilus lacrimalis*/Anaeococcus lactolyticus, *Peptostreptococcus anaerobius*/Anaeococcus lactolyticus, *Peptostreptococcus stomatis*/Anaeococcus lactolyticus, *Porphyromonas asaccharolytica*/Anaeococcus lactolyticus, *Porphyromonas uenonis*/Anaeococcus lactolyticus, *Prevotella amnii*/Anaeococcus lactolyticus, *Prevotella bergensis*/Anaeococcus lactolyticus, *Prevotella bivia*/Anaeococcus lactolyticus, *Prevotella buccae*/Anaeococcus lactolyticus, *Prevotella buccalis*/Anaeococcus lactolyticus, *Prevotella copri*/Anaeococcus lactolyticus, *Prevotella disiens*/Anaeococcus lactolyticus, *Prevotella melaninogenica*/Anaeococcus lactolyticus, *Prevotella multiformis*/Anaeococcus lactolyticus, *Prevotella oralis*/Anaeococcus lactolyticus, *Prevotella oris*/Anaeococcus lactolyticus, *Prevotella salivae*/Anaeococcus lactolyticus, *Prevotella timonensis*/Anaeococcus lactolyticus, *Propionibacterium acnes*/Anaeococcus lactolyticus, *Propionibacterium freudenreichii*/Anaeococcus lactolyticus, *Proteus mirabilis*/Anaeococcus lactolyticus, *Proteus penneri*/Anaeococcus lactolyticus, *Pseudoflavonifractor capillosus*/Anaeococcus lactolyticus, *Pseudomonas aeruginosa*/Anaeococcus lactolyticus, *Pseudomonas fluorescens*/Anaeococcus lactolyticus, *Pseudomonas putida*/Anaeococcus lactolyticus, *Pseudoramibacter alactolyticus*/Anaeococcus lactolyticus, *Rhodopseudomonas palustris*/Anaeococcus lactolyticus, *Roseburia intestinalis*/Anaeococcus lactolyticus, *Roseburia inulinivorans*/Anaeococcus lactolyticus, *Rothia dentocariosa*/Anaeococcus lactolyticus, *Rothia mucilaginosa*/Anaeococcus lactolyticus, *Ruminococcus albus*/Anaeococcus lactolyticus, *Ruminococcus bromii*/Anaeococcus lactolyticus, *Ruminococcus gnavus*/Anaeococcus lactolyticus, *Ruminococcus lactaris*/Anaeococcus lactolyticus, *Ruminococcus obeum*/Anaeococcus lactolyticus, *Ruminococcus torques*/Anaeococcus lactolyticus, *Selenomonas sputigena*/Anaeococcus lactolyticus, *Shigella boydii*/Anaeococcus lactolyticus, *Shigella dysenteriae*/Anaeococcus lactolyticus, *Shigella sonnei*/Anaeococcus lactolyticus, *Slackia exigua*/Anaeococcus lactolyticus, *Solobacterium moorei*/Anaeococcus lactolyticus, *Staphylococcus aureus*/Anaeococcus lactolyticus, *Staphylococcus epidermidis*/Anaeococcus lactolyticus, *Staphylococcus hominis*/Anaeococcus lactolyticus, *Staphylococcus saprophyticus*/Anaeococcus lactolyticus, *Staphylococcus warneri*/Anaeococcus lactolyticus, *Streptococcus agalactiae*/Anaeococcus lactolyticus, *Streptococcus anginosus*/Anaeococcus lactolyticus, *Streptococcus australis*/Anaeococcus lactolyticus, *Streptococcus bovis*/Anaeococcus lactolyticus, *Streptococcus cristatus*/Anaeococcus lactolyticus, *Streptococcus dysgalactiae*/Anaeococcus lactolyticus, *Streptococcus equinus*/Anaeococcus lactolyticus, *Streptococcus gordonii*/Anaeococcus lactolyticus, *Streptococcus infantarius*/Anaeococcus lactolyticus, *Streptococcus infantis*/Anaeococcus lactolyticus, *Streptococcus mitis*/Anaeococcus lactolyticus, *Streptococcus mutans*/Anaeococcus lactolyticus, *Streptococcus oralis*/Anaeococcus lactolyticus, *Streptococcus peroris*/Anaeococcus lactolyticus, *Streptococcus pneumoniae*/Anaeococcus lactolyticus, *Streptococcus salivarius*/Anaeococcus lactolyticus, *Streptococcus sanguinis*/Anaeococcus lactolyticus, *Streptococcus thermophilus*/Anaeococcus lactolyticus, *Streptococcus vestibularis*/Anaeococcus lactolyticus, *Subdoligranulum variable*/Anaeococcus lactolyticus, *Succinatimonas hippei*/Anaeococcus lactolyticus, *Sutterella wadsworthensis*/Anaeococcus lactolyticus, *Tropheryma whippelii*/Anaeococcus lactolyticus, *Veillonella atypica*/Anaeococcus lactolyticus, *Veillonella dispar*/Anaeococcus lactolyticus, *Veillonella parvula*/Anaeococcus lactolyticus, *Victivallis vadensis*/Anaeococcus vaginalis, *Anaeococcus vaginalis*/Anaeococcus vaginalis, *Anaerostipes caccae*/Anaeococcus vaginalis, *Anaerotruncus colihominis*/Anaeococcus vaginalis, *Atopobium parvulum*/Anaeococcus vaginalis, *Atopobium rimae*/Anaeococcus vaginalis, *Atopobium vaginae*/Anaeococcus vaginalis, *Bacteroides caccae*/Anaeococcus vaginalis, *Bacteroides cellulosyticus*/Anaeococcus vaginalis, *Bacteroides coprococci*/Anaeococcus vaginalis, *Bacteroides coprophilus*/Anaeococcus vaginalis, *Bacteroides dorei*/Anaeococcus vaginalis, *Bacteroides eggerthii*/Anaeococcus vaginalis, *Bacteroides finegoldii*/Anaeococcus vaginalis, *Bacteroides fragilis*/Anaeococcus vaginalis, *Bacteroides helcogenes*/Anaeococcus vaginalis, *Bacteroides intestinalis*/Anaeococcus vaginalis, *Bacteroides ovatus*/Anaeococcus vaginalis, *Bacteroides pectinophilus*/Anaeococcus vaginalis, *Bacteroides plebeius*/Anaeococcus vaginalis, *Bacteroides*

110

111

112

producta/Atopobium vaginae, Blautia schinkii/Atopobium vaginae, Brevibacterium linens/Atopobium vaginae, Brucella ceti/Atopobium vaginae, Brucella suis/Atopobium vaginae, Bulleidia extructa/Atopobium vaginae, Butyrivibrio crossotus/Atopobium vaginae, Campylobacter concisus/Atopobium vaginae, Campylobacter curvus/Atopobium vaginae, Campylobacter gracilis/Atopobium vaginae, Campylobacter hominis/Atopobium vaginae, Capnocytophaga ochracea/Atopobium vaginae, Cardiobacterium hominis/Atopobium vaginae, Catenibacterium mitsuokai/Atopobium vaginae, Catonella morbi/Atopobium vaginae, Citrobacter koseri/Atopobium vaginae, Clostridium asparagiforme/Atopobium vaginae, Clostridium bartlettii/Atopobium vaginae, Clostridium boltea/Atopobium vaginae, Clostridium botulinum/Atopobium vaginae, Clostridium butyricum/Atopobium vaginae, Clostridium difficile/Atopobium vaginae, Clostridium disporicum/Atopobium vaginae, Clostridium hathewayi/Atopobium vaginae, Clostridium hylemonae/Atopobium vaginae, Clostridium innocuum/Atopobium vaginae, Clostridium leptum/Atopobium vaginae, Clostridium mayombe/Atopobium vaginae, Clostridium methylpentosum/Atopobium vaginae, Clostridium nexile/Atopobium vaginae, Clostridium orbiscindens/Atopobium vaginae, Clostridium perfringens/Atopobium vaginae, Clostridium saccharolyticum/Atopobium vaginae, Clostridium scindens/Atopobium vaginae, Clostridium symbiosum/Atopobium vaginae, Clostridium tertium/Atopobium vaginae, Collinsella aerofaciens/Atopobium vaginae, Collinsella intestinalis/Atopobium vaginae, Collinsella stercoris/Atopobium vaginae, Coprobacillus sp. D7/Atopobium vaginae, Coprococcus catus/Atopobium vaginae, Coprococcus comes/Atopobium vaginae, Coprococcus gordonii/Atopobium vaginae, Corynebacterium aurumucosum/Atopobium vaginae, Corynebacterium matruchotii/Atopobium vaginae, Cryptobacterium curtum/Atopobium vaginae, Desulfovibrio desulfuricans/Atopobium vaginae, Desulfovibrio piger/Atopobium vaginae, Dialister invisus/Atopobium vaginae, Dialister microaerophilus/Atopobium vaginae, Dorea formicigenans/Atopobium vaginae, Dorea longicatena/Atopobium vaginae, Eggerthella lenta/Atopobium vaginae, Eikenella corrodens/Atopobium vaginae, Enterobacter cancerogenus/Atopobium vaginae, Enterobacter cloacae/Atopobium vaginae, Enterococcus faecalis/Atopobium vaginae, Enterococcus faecium/Atopobium vaginae, Enterococcus gallinarum/Atopobium vaginae, Erysipelotrichaceae bacterium 3_1_53/Atopobium vaginae, Escherichia coli/Atopobium vaginae, Escherichia fergusonii/Atopobium vaginae, Ethanoligenens harbinensis/Atopobium vaginae, Eubacterium cellulosolvens/Atopobium vaginae, Eubacterium eligens/Atopobium vaginae, Eubacterium hallii/Atopobium vaginae, Eubacterium limosum/Atopobium vaginae, Eubacterium rectale/Atopobium vaginae, Eubacterium siraeum/Atopobium vaginae, Eubacterium ventriosum/Atopobium vaginae, Faecalibacterium prausnitzii/Atopobium vaginae, Finegoldia magna/Atopobium vaginae, Fusobacterium gonidiaformans/Atopobium vaginae, Fusobacterium mortiferum/Atopobium vaginae, Fusobacterium nucleatum/Atopobium vaginae, Fusobacterium varium/Atopobium vaginae, Gardnerella vaginalis/Atopobium vaginae, Gemella haemolysans/Atopobium vaginae, Gemella morbillorum/Atopobium vaginae, Gordonia pamelae/Atopobium vaginae, Granulicatella adiacens/Atopobium vaginae, Granulicatella elegans/Atopobium vaginae, Haemophilus influenzae/Atopobium vaginae, Haemophilus parainfluenzae/Atopobium vaginae, Helicobacter pullorum/Atopobium vaginae, Helicobacter pylori/Atopobium vaginae, Holdemania filiformis/Atopobium vaginae, Kingella oralis/Atopobium vaginae, Klebsiella pneumoniae/Atopobium vaginae, Klebsiella variicola/Atopobium vaginae, Lachnospiraceae bacterium 5_1_57FAA/Atopobium vaginae, Lactobacillus acidophilus/Atopobium vaginae, Lactobacillus amylovorus/Atopobium vaginae, Lactobacillus brevis/Atopobium vaginae, Lactobacillus casei/Atopobium vaginae, Lactobacillus crispatus/Atopobium vaginae, Lactobacillus delbrueckii/Atopobium vaginae, Lactobacillus fermentum/Atopobium vaginae, Lactobacillus gasseri/Atopobium vaginae, Lactobacillus iners/Atopobium vaginae, Lactobacillus jensenii/Atopobium vaginae, Lactobacillus johnsonii/Atopobium vaginae, Lactobacillus paracasei/Atopobium vaginae, Lactobacillus plantarum/Atopobium vaginae, Lactobacillus reuteri/Atopobium vaginae, Lactobacillus rhamnosus/Atopobium vaginae, Lactobacillus ruminis/Atopobium vaginae, Lactobacillus sakei/Atopobium vaginae, Lactobacillus salivarius/Atopobium vaginae, Lactococcus lactis/Atopobium vaginae, Lautropia mirabilis/Atopobium vaginae, Leuconostoc citreum/Atopobium vaginae, Leuconostoc gasicomitatum/Atopobium vaginae, Leuconostoc mesenteroides/Atopobium vaginae, Listeria monocytogenes/Atopobium vaginae, Marvinbryantia formatexigens/Atopobium vaginae, Megamonas hypermegale/Atopobium vaginae, Megasphaera micronuciformis/Atopobium vaginae, Methanobrevibacter smithii/Atopobium vaginae, Methanospaera stadmanae/Atopobium vaginae, Methylobacterium radiotolerans/Atopobium vaginae, Mitsuokella multacida/Atopobium vaginae, Mobiluncus curtisii/Atopobium vaginae, Mycoplasma hominis/Atopobium vaginae, Neisseria mucosa/Atopobium vaginae, Neisseria splanchnicus/Atopobium vaginae, Odoribacter splanchnicus/Atopobium vaginae, Olsenella uli/Atopobium vaginae, Oribacterium sinus/Atopobium vaginae, Oxalobacter formigenes/Atopobium vaginae, Parabacteroides distansoni/Atopobium vaginae, Parabacteroides johnsonii/Atopobium vaginae, Parabacteroides merdae/Atopobium vaginae, Parvimonas micra/Atopobium vaginae, Pediococcus acidilactici/Atopobium vaginae, Peptoniphilus duerdenii/Atopobium vaginae, Peptoniphilus harei/Atopobium vaginae, Peptoniphilus lacrimalis/Atopobium vaginae, Peptostreptococcus anaerobius/Atopobium vaginae, Peptostreptococcus stomatis/Atopobium vaginae, Porphyromonas asaccharolytica/Atopobium vaginae, Porphyromonas uenonis/Atopobium vaginae, Prevotella amnii/Atopobium vaginae, Prevotella bergensis/Atopobium vaginae, Prevotella bivia/Atopobium vaginae, Prevotella buccae/Atopobium vaginae, Prevotella buccalis/Atopobium vaginae, Prevotella disiens/Atopobium vaginae, Prevotella melaninogenica/Atopobium vaginae, Prevotella multifomnis/Atopobium vaginae, Prevotella oralis/Atopobium vaginae, Prevotella oris/Atopobium vaginae, Prevotella salivae/Atopobium vaginae, Prevotella timonensis/Atopobium vaginae, Propionibacterium acnes/Atopobium vaginae, Propionibacterium freudenreichii/Atopobium vaginae, Proteus mirabilis/Atopobium vaginae, Proteus penneri/Atopobium vaginae, Pseudoflavonifractor capillosus/Atopobium vaginae, Pseudomonas aeruginosa/Atopobium vaginae, Pseudomonas fluorescens/Atopobium vaginae, Pseudomonas putida/Atopobium vaginae, Pseudorambacter alactolyticus/Atopobium vaginae, Pyramidobacter piscis/Atopobium vaginae, Rhodospirillum rubrum/Atopobium vaginae, Rhodospirillum rubrum/Atopobium vaginae, Roseburia intestinalis/Atopobium vaginae, Roseburia inulinivorans/Atopobium vaginae, Rothia dentocariosa/Atopobium vaginae, Rothia mucilaginosa/Atopobium vaginae, Ruminococcus albus/Atopobium vaginae, Ruminococcus bromii/Atopobium vaginae, Ruminococcus gnavus/Atopobium vaginae, Ruminococcus lactaris/Atopobium vaginae, Ruminococcus obeum/Atopobium vaginae, Ruminococcus torques/Atopobium vaginae, Selenomonas sputigena/Atopobium vaginae, Shigella boydii/Atopobium vaginae, Shigella dysenteriae/Atopobium vaginae, Shigella sonnei/Atopobium vaginae, Slackia exigua/Atopobium vaginae, Solobacterium moorei/Atopobium vaginae, Staphylococcus aureus/Atopobium vaginae, Staphylococcus epidermidis/Atopobium vaginae, Staphylococcus hominis/Atopobium vaginae, Staphylococcus saprophyticus/Atopobium vaginae, Staphylococcus warneri/Atopobium vaginae, Streptococcus agalactiae/Atopobium vaginae, Streptococcus anginosus/Atopobium vaginae, Streptococcus australis/Atopobium vaginae, Streptococcus bovis/Atopobium vaginae, Streptococcus cristatus/Atopobium vaginae, Streptococcus dysgalactiae/Atopobium vaginae, Streptococcus equinus/Atopobium vaginae, Streptococcus gordonii/Atopobium vaginae, Streptococcus infantarius/Atopobium vaginae, Streptococcus infantis/Atopobium vaginae, Streptococcus mitis/Atopobium vaginae, Streptococcus mutans/Atopobium vaginae, Streptococcus oralis/Atopobium vaginae, Streptococcus parasanguinis/Atopobium vaginae, Streptococcus peroris/Atopobium vaginae, Streptococcus pneumoniae/Atopobium vaginae, Streptococcus salivarius/Atopobium vaginae, Streptococcus sanguinis/Atopobium vaginae, Streptococcus thermophilus/Atopobium vaginae, Streptococcus vestibularis/Atopobium vaginae, Subdoligranulum variable/Atopobium vaginae, Succinatum hippel/Atopobium vaginae, Sutterella wadsworthensis/Atopobium vaginae, Tropheryma whippelii/Atopobium vaginae, Veillonella atypica/Atopobium vaginae, Veillonella dispar/Atopobium vaginae, Veillonella parvula/Atopobium vaginae, Victivallis vadensis/Bacteroides caccae, Bacteroides caccae, Bacteroides dorei/Bacteroides caccae, Bacteroides eggerthii/Bacteroides caccae, Bacteroides finegoldii/Bacteroides caccae, Bacteroides fragilis/Bacteroides caccae, Bacteroides helcogenes/Bacteroides caccae, Bacteroides intestinalis/Bacteroides caccae, Bacteroides ovatus/Bacteroides caccae, Bacteroides pectinophilus/Bacteroides caccae, Bacteroides plebeius/Bacteroides caccae, Bacteroides salanitronis/Bacteroides caccae, Bacteroides sp. 1_1_6/Bacteroides caccae, Bacteroides sp. 3_1_23/Bacteroides caccae, Bacteroides stercoris/Bacteroides caccae, Bacteroides thetaiotaomicron/Bacteroides caccae, Bacteroides uniformis/Bacteroides caccae, Bacteroides vulgatus/Bacteroides caccae, Bacteroides xylanisolvens/Bacteroides caccae, Bifidobacterium adolescentis/Bacteroides caccae, Bifidobacterium angulatum/Bacteroides caccae, Bifidobacterium animalis/Bacteroides caccae, Bifidobacterium bifidum/Bacteroides caccae, Bifidobacterium breve/Bacteroides caccae, Bifidobacterium catenulatum/Bacteroides caccae, Bifidobacterium dentium/Bacteroides caccae, Bifidobacterium infantis/Bacteroides caccae, Bifidobacterium longum/Bacteroides caccae, Bifidobacterium pseudocatenulatum/Bacteroides caccae, Bilophila wadsworthia/Bacteroides caccae, Blautia hansenii/Bacteroides caccae, Blautia hydrogenotrophica/Bacteroides caccae, Blautia producta/Bacteroides caccae, Blautia schinkii/Bacteroides caccae, Brevibacterium linens/Bacteroides caccae, Brucella ceti/Bacteroides caccae, Brucella suis/Bacteroides caccae, Bulleidia extructa/Bacteroides caccae, Butyrivibrio crossotus/Bacteroides caccae, Campylobacter concisus/Bacteroides caccae, Campylobacter curvus/Bacteroides caccae, Campylobacter gracilis/Bacteroides caccae, Campylobacter hominis/Bacteroides caccae, Capnocytophaga ochracea/Bacteroides caccae, Cardiobacterium hominis/Bacteroides caccae, Catenibacterium mitsuokai/Bacteroides caccae, Catonella morbi/Bacteroides caccae, Citrobacter koseri/Bacteroides caccae, Clostridium asparagiforme/Bacteroides caccae, Clostridium bartlettii/Bacteroides caccae, Clostridium boltea/Bacteroides caccae, Clostridium botulinum/Bacteroides caccae, Clostridium butyricum/Bacteroides caccae, Clostridium difficile/Bacteroides caccae, Clostridium disporicum/Bacteroides caccae, Clostridium hathewayi/Bacteroides caccae, Clostridium hylemonae/Bacteroides caccae, Clostridium innocuum/Bacteroides caccae, Clostridium leptum/Bacteroides caccae, Clostridium mayombe/Bacteroides caccae, Clostridium methylpentosum/Bacteroides caccae, Clostridium nexile/Bacteroides caccae, Clostridium orbiscindens/Bacteroides caccae, Clostridium perfringens/Bacteroides caccae, Clostridium saccharolyticum/Bacteroides caccae, Clostridium scindens/Bacteroides caccae, Clostridium symbiosum/Bacteroides caccae, Clostridium tertium/Bacteroides caccae, Collinsella aerofaciens/Bacteroides caccae, Collinsella intestinalis/Bacteroides caccae, Collinsella stercoris/Bacteroides caccae, Coprobacillus sp. D7/Bacteroides caccae, Coprococcus catus/Bacteroides caccae, Coprococcus comes/Bacteroides caccae, Coprococcus gordonii/Bacteroides caccae, Corynebacterium aurumucosum/Bacteroides caccae, Corynebacterium matruchotii/Bacteroides caccae, Cryptobacterium curtum/Bacteroides caccae, Desulfovibrio desulfuricans/Bacteroides caccae, Desulfovibrio piger/Bacteroides caccae, Dialister invisus/Bacteroides caccae, Dialister microaerophilus/Bacteroides caccae, Dorea formicigenans/Bacteroides caccae, Dorea longicatena/Bacteroides caccae, Eggerthella lenta/Bacteroides caccae, Eikenella corrodens/Bacteroides caccae, Enterobacter cancerogenus/Bacteroides caccae, Enterobacter cloacae/Bacteroides caccae, Enterococcus faecalis/Bacteroides caccae, Enterococcus faecium/Bacteroides caccae, Enterococcus gallinarum/Bacteroides caccae, Erysipelotrichaceae bacterium 3_1_53/Bacteroides caccae, Escherichia coli/Bacteroides caccae, Escherichia fergusonii/Bacteroides caccae, Ethanoligenens harbinensis/Bacteroides caccae, Eubacterium cellulosolvens/Bacteroides caccae, Eubacterium eligens/Bacteroides caccae, Eubacterium hallii/Bacteroides caccae, Eubacterium limosum/Bacteroides caccae, Eubacterium rectale/Bacteroides caccae, Eubacterium siraeum/Bacteroides caccae, Eubacterium ventriosum/Bacteroides caccae, Faecalibacterium prausnitzii/Bacteroides caccae, Finegoldia magna/Bacteroides caccae, Fusobacterium gonidiaformans/Bacteroides caccae, Fusobacterium mortiferum/Bacteroides caccae, Fusobacterium nucleatum/Bacteroides caccae, Fusobacterium varium/Bacteroides caccae, Gardnerella vaginalis/Bacteroides caccae, Gemella haemolysans/Bacteroides caccae, Gemella morbillorum/Bacteroides caccae, Gordonia pamelae/Bacteroides caccae, Granulicatella adiacens/Bacteroides caccae, Granulicatella elegans/Bacteroides caccae, Haemophilus influenzae/Bacteroides caccae, Haemophilus parainfluenzae/Bacteroides caccae, Helicobacter pullorum/Bacteroides caccae, Helicobacter pylori/Bacteroides caccae, Holdemania filiformis/Bacteroides caccae, Kingella oralis/Bacteroides caccae, Klebsiella pneumoniae/Bacteroides caccae, Klebsiella variicola/Bacteroides caccae, Lachnospiraceae bacterium 5_1_57FAA/Bacteroides caccae, Lactobacillus acidophilus/Bacteroides caccae, Lactobacillus amylovorus/Bacteroides caccae, Lactobacillus brevis/Bacteroides caccae, Lactobacillus casei/Bacteroides caccae, Lactobacillus crispatus/Bacteroides caccae, Lactobacillus delbrueckii/Bacteroides caccae, Lactobacillus fermentum/Bacteroides caccae, Lactobacillus gasseri/Bacteroides caccae, Lactobacillus iners/Bacteroides caccae, Lactobacillus jensenii/Bacteroides caccae, Lactobacillus johnsonii/Bacteroides caccae, Lactobacillus paracasei/Bacteroides caccae, Lactobacillus plantarum/Bacteroides caccae, Lactobacillus reuteri/Bacteroides caccae, Lactobacillus rhamnosus/Bacteroides caccae, Lactobacillus ruminis/Bacteroides caccae, Lactobacillus sakei/Bacteroides caccae, Lactobacillus salivarius/Bacteroides caccae, Lactococcus lactis/Bacteroides caccae, Lautropia mirabilis/Bacteroides caccae, Leuconostoc citreum/Bacteroides caccae, Leuconostoc gasicomitatum/Bacteroides caccae, Leuconostoc mesenteroides/Bacteroides caccae, Listeria monocytogenes/Bacteroides caccae, Marvinbryantia formatexigens/Bacteroides caccae, Megamonas hypermegale/Bacteroides caccae, Megasphaera micronuciformis/Bacteroides caccae, Methanobrevibacter smithii/Bacteroides caccae, Methanospaera stadmanae/Bacteroides caccae, Methylobacterium radiotolerans/Bacteroides caccae, Mitsuokella multacida/Bacteroides caccae, Mobiluncus curtisii/Bacteroides caccae, Mycoplasma hominis/Bacteroides caccae, Neisseria mucosa/Bacteroides caccae, Odoribacter splanchnicus/Bacteroides caccae, Olsenella uli/Bacteroides caccae, Oribacterium sinus/Bacteroides caccae, Oxalobacter formigenes/Bacteroides caccae, Parabacteroides distansoni/Bacteroides caccae, Parabacteroides johnsonii/Bacteroides caccae, Parabacteroides merdae/Bacteroides caccae, Parvimonas micra/Bacteroides caccae, Pediococcus acidilactici/Bacteroides caccae, Pediococcus pentosaceus/Bacteroides caccae, Peptoniphilus duerdenii/Bacteroides caccae, Peptoniphilus harei/Bacteroides caccae, Peptoniphilus lacrimalis/Bacteroides caccae, Peptostreptococcus anaerobius/Bacteroides caccae, Peptostreptococcus stomatis/Bacteroides caccae, Porphyromonas asaccharolytica/Bacteroides caccae, Porphyromonas uenonis/Bacteroides caccae, Prevotella amnii/Bacteroides caccae, Prevotella bergensis/Bacteroides caccae, Prevotella bivia/Bacteroides caccae, Prevotella buccae/Bacteroides caccae, Prevotella buccalis/Bacteroides caccae, Prevotella disiens/Bacteroides caccae, Prevotella melaninogenica/Bacteroides caccae, Prevotella multifomnis/Bacteroides caccae, Prevotella oralis/Bacteroides caccae, Prevotella oris/Bacteroides caccae, Prevotella salivae/Bacteroides caccae, Prevotella timonensis/Bacteroides caccae, Propionibacterium acnes/Bacteroides caccae, Propionibacterium freudenreichii/Bacteroides caccae, Proteus mirabilis/Bacteroides caccae, Proteus penneri/Bacteroides caccae, Pseudoflavonifractor capillosus/Bacteroides caccae, Pseudomonas aeruginosa/Bacteroides caccae, Pseudomonas fluorescens/Bacteroides caccae, Pseudomonas putida/Bacteroides caccae, Pseudorambacter alactolyticus/Bacteroides caccae, Pyramidobacter piscis/Bacteroides caccae, Rhodospirillum rubrum/Bacteroides caccae, Rhodospirillum rubrum/Bacteroides caccae, Roseburia intestinalis/Bacteroides caccae, Roseburia inulinivorans/Bacteroides caccae, Rothia dentocariosa/Bacteroides caccae, Rothia mucilaginosa/Bacteroides caccae, Ruminococcus albus/Bacteroides caccae, Ruminococcus bromii/Bacteroides caccae, Ruminococcus gnavus/Bacteroides caccae, Ruminococcus lactaris/Bacteroides caccae, Ruminococcus obeum/Bacteroides caccae, Ruminococcus torques/Bacteroides caccae, Selenomonas sputigena/Bacteroides caccae, Shigella boydii/Bacteroides caccae, Shigella dysenteriae/Bacteroides caccae, Shigella sonnei/Bacteroides caccae, Slackia exigua/Bacteroides caccae, Solobacterium moorei/Bacteroides caccae, Staphylococcus aureus/Bacteroides caccae, Staphylococcus epidermidis/Bacteroides caccae, Staphylococcus hominis/Bacteroides caccae, Staphylococcus saprophyticus/Bacteroides caccae, Staphylococcus warneri/Bacteroides caccae, Streptococcus agalactiae/Bacteroides caccae, Streptococcus anginosus/Bacteroides caccae, Streptococcus australis/Bacteroides caccae, Streptococcus bovis/Bacteroides caccae, Streptococcus cristatus/Bacteroides caccae, Streptococcus dysgalactiae/Bacteroides caccae, Streptococcus equinus/Bacteroides caccae, Streptococcus gordonii/Bacteroides caccae, Streptococcus infantarius/Bacteroides caccae, Streptococcus infantis/Bacteroides caccae, Streptococcus mitis/Bacteroides caccae, Streptococcus mutans/Bacteroides caccae, Streptococcus oralis/Bacteroides caccae, Streptococcus parasanguinis/Bacteroides caccae, Streptococcus peroris/Bacteroides caccae, Streptococcus pneumoniae/Bacteroides caccae, Streptococcus

114

coprocola, *Lactobacillus ruminis*[Bacteroides coprocola, *Lactobacillus sakei*[Bacteroides coprocola, *Lactobacillus salivarius*[Bacteroides coprocola, *Lactococcus lactis*[Bacteroides coprocola, *Lautropia mirabilis*[Bacteroides coprocola, *Leuconostoc citreum*[Bacteroides coprocola, *Leuconostoc gascomitatum*[Bacteroides coprocola, *Leuconostoc mesenteroides*[Bacteroides coprocola, *Listeria monocytogenes*[Bacteroides coprocola, *Marvinbryantia formatexigens*[Bacteroides coprocola, *Megamonas hypermegale*[Bacteroides coprocola, *Megasphaera micronuciformis*[Bacteroides coprocola, *Methanobrevibacter smithii*[Bacteroides coprocola, *Methanosphaera stadtmanae*[Bacteroides coprocola, *Methylobacterium radiotolerans*[Bacteroides coprocola, *Mitsuokella multacidia*[Bacteroides coprocola, *Mobiluncus curtisii*[Bacteroides coprocola, *Mycoplasma hominis*[Bacteroides coprocola, *Neisseria mucosa*[Bacteroides coprocola, *Odoribacter splanchnicus*[Bacteroides coprocola, *Olsenella ulii*[Bacteroides coprocola, *Oribacterium sinus*[Bacteroides coprocola, *Oxalobacter formigenes*[Bacteroides coprocola, *Parabacteroides distasonis*[Bacteroides coprocola, *Parabacteroides johnsonii*[Bacteroides coprocola, *Parabacteroides merdae*[Bacteroides coprocola, *Parvimonas micra*[Bacteroides coprocola, *Pediococcus acidilactici*[Bacteroides coprocola, *Pediococcus pentosaceus*[Bacteroides coprocola, *Peptoniphilus duerdenii*[Bacteroides coprocola, *Peptoniphilus harei*[Bacteroides coprocola, *Peptoniphilus lacrimalis*[Bacteroides coprocola, *Peptostreptococcus anaerobius*[Bacteroides coprocola, *Peptostreptococcus stomatis*[Bacteroides coprocola, *Porphyromonas asaccharolytica*[Bacteroides coprocola, *Porphyromonas uenonis*[Bacteroides coprocola, *Prevotella amnii*[Bacteroides coprocola, *Prevotella bergensis*[Bacteroides coprocola, *Prevotella bivia*[Bacteroides coprocola, *Prevotella buccae*[Bacteroides coprocola, *Prevotella buccalis*[Bacteroides coprocola, *Prevotella copri*[Bacteroides coprocola, *Prevotella disiens*[Bacteroides coprocola, *Prevotella melaninogenica*[Bacteroides coprocola, *Prevotella multiformis*[Bacteroides coprocola, *Prevotella oralis*[Bacteroides coprocola, *Prevotella oris*[Bacteroides coprocola, *Prevotella salivae*[Bacteroides coprocola, *Prevotella timonensis*[Bacteroides coprocola, *Propionibacterium acnes*[Bacteroides coprocola, *Propionibacterium freudenreichii*[Bacteroides coprocola, *Proteus mirabilis*[Bacteroides coprocola, *Proteus penneri*[Bacteroides coprocola, *Pseudoflavonifractor capillosus*[Bacteroides coprocola, *Pseudomonas aeruginosa*[Bacteroides coprocola, *Pseudomonas fluorescens*[Bacteroides coprocola, *Pseudomonas putida*[Bacteroides coprocola, *Pseudoramibacter alactolyticus*[Bacteroides coprocola, *Pyramidobacter piscolens*[Bacteroides coprocola, *Rhodopseudomonas palustris*[Bacteroides coprocola, *Roseburia intestinalis*[Bacteroides coprocola, *Roseburia inulinivorans*[Bacteroides coprocola, *Rothia dentocariosa*[Bacteroides coprocola, *Rothia mucilaginosa*[Bacteroides coprocola, *Ruminococcus albus*[Bacteroides coprocola, *Ruminococcus bromii*[Bacteroides coprocola, *Ruminococcus gnavus*[Bacteroides coprocola, *Ruminococcus lactaris*[Bacteroides coprocola, *Ruminococcus obeum*[Bacteroides coprocola, *Ruminococcus torques*[Bacteroides coprocola, *Selenomonas putigena*[Bacteroides coprocola, *Shigella boydii*[Bacteroides coprocola, *Shigella dysenteriae*[Bacteroides coprocola, *Shigella sonnei*[Bacteroides coprocola, *Slackia exigua*[Bacteroides coprocola, *Solobacterium moorei*[Bacteroides coprocola, *Staphylococcus aureus*[Bacteroides coprocola, *Staphylococcus epidermidis*[Bacteroides coprocola, *Staphylococcus hominis*[Bacteroides coprocola, *Staphylococcus saprophyticus*[Bacteroides coprocola, *Staphylococcus warneri*[Bacteroides coprocola, *Streptococcus agalactiae*[Bacteroides coprocola, *Streptococcus anginosus*[Bacteroides coprocola, *Streptococcus australis*[Bacteroides coprocola, *Streptococcus bovis*[Bacteroides coprocola, *Streptococcus cristatus*[Bacteroides coprocola, *Streptococcus dysgalactiae*[Bacteroides coprocola, *Streptococcus equinus*[Bacteroides coprocola, *Streptococcus gordonii*[Bacteroides coprocola, *Streptococcus infantarius*[Bacteroides coprocola, *Streptococcus infantis*[Bacteroides coprocola, *Streptococcus mitis*[Bacteroides coprocola, *Streptococcus mutans*[Bacteroides coprocola, *Streptococcus oralis*[Bacteroides coprocola, *Streptococcus parasanguinis*[Bacteroides coprocola, *Streptococcus peroris*[Bacteroides coprocola, *Streptococcus pneumoniae*[Bacteroides coprocola, *Streptococcus salivarius*[Bacteroides coprocola, *Streptococcus sanguinis*[Bacteroides coprocola, *Streptococcus thermophilus*[Bacteroides coprocola, *Streptococcus vestibularis*[Bacteroides coprocola, *Subdoligranulum variable*[Bacteroides coprocola, *Succinatimonas hippel*[Bacteroides coprocola, *Sutterella wadsworthensis*[Bacteroides coprocola, *Tropheryma whippelii*[Bacteroides coprocola, *Veillonella atypica*[Bacteroides coprocola, *Veillonella dispar*[Bacteroides coprocola, *Veillonella parvula*[Bacteroides coprocola, *Victivallis vadensis*[Bacteroides coprophilus, *Bacteroides coprophilus*, *Bacteroides coprophilus*, *Bacteroides dorei*[Bacteroides coprophilus, *Bacteroides eggerthii*[Bacteroides coprophilus, *Bacteroides finegoldii*[Bacteroides coprophilus, *Bacteroides fragilis*[Bacteroides coprophilus, *Bacteroides helcogenes*[Bacteroides coprophilus, *Bacteroides intestinalis*[Bacteroides coprophilus, *Bacteroides ovatus*[Bacteroides coprophilus, *Bacteroides pectinophilus*[Bacteroides coprophilus, *Bacteroides plebeius*[Bacteroides coprophilus, *Bacteroides salanitronis*[Bacteroides coprophilus, *Bacteroides sp. 1_1_6*[Bacteroides coprophilus, *Bacteroides sp. 3_1_23*[Bacteroides coprophilus, *Bacteroides stercoris*[Bacteroides coprophilus, *Bacteroides thetaiotaomicron*[Bacteroides coprophilus, *Bacteroides uniformis*[Bacteroides coprophilus, *Bacteroides vulgatus*[Bacteroides coprophilus, *Bacteroides xylanisolvens*[Bacteroides coprophilus, *Bifidobacterium adolescentis*[Bacteroides coprophilus, *Bifidobacterium angulatum*[Bacteroides coprophilus, *Bifidobacterium animalis*[Bacteroides coprophilus, *Bifidobacterium bifidum*[Bacteroides coprophilus, *Bifidobacterium breve*[Bacteroides coprophilus, *Bifidobacterium catenulatum*[Bacteroides coprophilus, *Bifidobacterium dentium*[Bacteroides coprophilus, *Bifidobacterium infantis*[Bacteroides coprophilus, *Bifidobacterium longum*[Bacteroides coprophilus, *Bifidobacterium pseudocatenulatum*[Bacteroides coprophilus, *Bilophila wadsworthia*[Bacteroides coprophilus, *Blautia hanseni*[Bacteroides coprophilus, *Blautia hydrogenotrophica*[Bacteroides coprophilus, *Blautia producta*[Bacteroides coprophilus, *Blautia schinkii*[Bacteroides coprophilus, *Brevibacterium linens*[Bacteroides coprophilus, *Brucella ceti*[Bacteroides coprophilus, *Brucella suis*[Bacteroides coprophilus, *Bulleidia extracta*[Bacteroides coprophilus, *Butyrivibrio crossotus*[Bacteroides coprophilus, *Campylobacter concisus*[Bacteroides coprophilus, *Campylobacter curvus*[Bacteroides coprophilus, *Campylobacter gracilis*[Bacteroides coprophilus, *Campylobacter hominis*[Bacteroides coprophilus, *Capnocytophaga ochracea*[Bacteroides coprophilus, *Cardiobacterium hominis*[Bacteroides coprophilus, *Catenibacterium mitsuokai*[Bacteroides coprophilus, *Catonella morbi*[Bacteroides coprophilus, *Citrobacter koseri*[Bacteroides coprophilus, *Clostridium asparagiforme*[Bacteroides coprophilus, *Clostridium bartlettii*[Bacteroides coprophilus, *Clostridium boltea*[Bacteroides coprophilus, *Clostridium botulinum*[Bacteroides coprophilus, *Clostridium butyricum*[Bacteroides coprophilus, *Clostridium difficile*[Bacteroides coprophilus, *Clostridium disporicum*[Bacteroides coprophilus, *Clostridium hathewayi*[Bacteroides coprophilus, *Clostridium hylemonae*[Bacteroides coprophilus, *Clostridium innocuum*[Bacteroides coprophilus, *Clostridium leptum*[Bacteroides coprophilus, *Clostridium mayombeii*[Bacteroides coprophilus, *Clostridium methylpentosum*[Bacteroides coprophilus, *Clostridium nexile*[Bacteroides coprophilus, *Clostridium orbiscindens*[Bacteroides coprophilus, *Clostridium perfringens*[Bacteroides coprophilus, *Clostridium scindens*[Bacteroides coprophilus, *Clostridium symbiosum*[Bacteroides coprophilus, *Clostridium tertium*[Bacteroides coprophilus, *Collinsella aerofaciens*[Bacteroides coprophilus, *Collinsella intestinalis*[Bacteroides coprophilus, *Collinsella stercoris*[Bacteroides coprophilus, *Coprobacillus sp. D7*[Bacteroides coprophilus, *Coprococcus catus*[Bacteroides coprophilus, *Coprococcus comes*[Bacteroides coprophilus, *Coprococcus eutactus*[Bacteroides coprophilus, *Corynebacterium aurimucosum*[Bacteroides coprophilus, *Corynebacterium matruchotii*[Bacteroides coprophilus, *Cryptobacterium curtum*[Bacteroides coprophilus, *Desulfovibrio desulfuricans*[Bacteroides coprophilus, *Desulfovibrio piger*[Bacteroides coprophilus, *Dialister invisus*[Bacteroides coprophilus, *Dialister microaerophilus*[Bacteroides coprophilus, *Dorea formicigenerans*[Bacteroides coprophilus, *Dorea longicatena*[Bacteroides coprophilus, *Eggerthella lenta*[Bacteroides coprophilus, *Eikenella corrodens*[Bacteroides coprophilus, *Enterobacter cancerogenus*[Bacteroides coprophilus, *Enterobacter cloacae*[Bacteroides coprophilus, *Enterococcus faecalis*[Bacteroides coprophilus, *Enterococcus faecium*[Bacteroides coprophilus, *Holdemanella filiformis*[Bacteroides coprophilus, *Kingella oralis*[Bacteroides coprophilus, *Klebsiella pneumoniae*[Bacteroides coprophilus, *Klebsiella varicola*[Bacteroides coprophilus, *Lachnospiraceae bacterium 5_1_57FAA*[Bacteroides coprophilus, *Lactobacillus acidophilus*[Bacteroides coprophilus, *Lactobacillus amylovorus*[Bacteroides coprophilus, *Lactobacillus brevis*[Bacteroides coprophilus, *Lactobacillus casei*[Bacteroides coprophilus, *Lactobacillus crispatus*[Bacteroides coprophilus, *Lactobacillus delbrueckii*[Bacteroides coprophilus, *Lactobacillus fermentum*[Bacteroides coprophilus, *Lactobacillus gasseri*[Bacteroides coprophilus, *Lactobacillus iners*[Bacteroides coprophilus, *Lactobacillus jensenii*[Bacteroides coprophilus, *Lactobacillus johnsonii*[Bacteroides coprophilus, *Lactobacillus paracasei*[Bacteroides coprophilus, *Lactobacillus plantarum*[Bacteroides coprophilus, *Lactobacillus reuteri*[Bacteroides coprophilus, *Lactobacillus rhamnosus*[Bacteroides coprophilus, *Lactobacillus ruminis*[Bacteroides coprophilus, *Lactobacillus sakei*[Bacteroides coprophilus, *Lactobacillus salivarius*[Bacteroides coprophilus, *Lactococcus lactis*[Bacteroides coprophilus, *Lautropia mirabilis*[Bacteroides coprophilus, *Leuconostoc citreum*[Bacteroides coprophilus, *Leuconostoc gascomitatum*[Bacteroides coprophilus, *Leuconostoc mesenteroides*[Bacteroides coprophilus, *Listeria monocytogenes*[Bacteroides coprophilus, *Marvinbryantia formatexigens*[Bacteroides coprophilus, *Megamonas hypermegale*[Bacteroides coprophilus, *Megasphaera micronuciformis*[Bacteroides coprophilus, *Methanobrevibacter smithii*[Bacteroides coprophilus, *Methanosphaera stadtmanae*[Bacteroides coprophilus, *Methylobacterium radiotolerans*[Bacteroides coprophilus, *Mitsuokella multacidia*[Bacteroides coprophilus, *Mobiluncus curtisii*[Bacteroides coprophilus, *Mycoplasma hominis*[Bacteroides coprophilus, *Neisseria mucosa*[Bacteroides coprophilus, *Odoribacter splanchnicus*[Bacteroides coprophilus, *Olsenella ulii*[Bacteroides coprophilus, *Oribacterium sinus*[Bacteroides coprophilus, *Oxalobacter formigenes*[Bacteroides coprophilus, *Parabacteroides distasonis*[Bacteroides coprophilus, *Parabacteroides johnsonii*[Bacteroides coprophilus, *Parabacteroides merdae*[Bacteroides coprophilus, *Parvimonas micra*[Bacteroides coprophilus, *Pediococcus acidilactici*[Bacteroides coprophilus, *Pediococcus pentosaceus*[Bacteroides coprophilus, *Peptoniphilus duerdenii*[Bacteroides coprophilus, *Peptoniphilus harei*[Bacteroides coprophilus, *Peptoniphilus lacrimalis*[Bacteroides coprophilus, *Peptostreptococcus anaerobius*[Bacteroides coprophilus, *Peptostreptococcus stomatis*[Bacteroides coprophilus, *Porphyromonas asaccharolytica*[Bacteroides coprophilus, *Porphyromonas uenonis*[Bacteroides coprophilus, *Prevotella amnii*[Bacteroides coprophilus, *Prevotella bergensis*[Bacteroides coprophilus, *Prevotella bivia*[Bacteroides coprophilus, *Prevotella buccae*[Bacteroides coprophilus, *Prevotella buccalis*[Bacteroides coprophilus, *Prevotella copri*[Bacteroides coprophilus, *Prevotella disiens*[Bacteroides coprophilus, *Prevotella melaninogenica*[Bacteroides coprophilus, *Prevotella multiformis*[Bacteroides coprophilus, *Prevotella oralis*[Bacteroides coprophilus, *Prevotella oris*[Bacteroides coprophilus, *Prevotella salivae*[Bacteroides coprophilus, *Prevotella timonensis*[Bacteroides coprophilus, *Propionibacterium acnes*[Bacteroides coprophilus, *Propionibacterium freudenreichii*[Bacteroides coprophilus, *Proteus mirabilis*[Bacteroides coprophilus, *Proteus penneri*[Bacteroides coprophilus, *Pseudoflavonifractor capillosus*[Bacteroides coprophilus, *Pseudomonas aeruginosa*[Bacteroides coprophilus, *Pseudomonas fluorescens*[Bacteroides coprophilus, *Pseudomonas putida*[Bacteroides coprophilus, *Pseudoramibacter alactolyticus*[Bacteroides coprophilus, *Pyramidobacter piscolens*[Bacteroides coprophilus, *Rhodopseudomonas palustris*[Bacteroides coprophilus, *Roseburia intestinalis*[Bacteroides coprophilus, *Roseburia inulinivorans*[Bacteroides coprophilus, *Rothia dentocariosa*[Bacteroides coprophilus, *Rothia mucilaginosa*[Bacteroides coprophilus, *Ruminococcus albus*[Bacteroides coprophilus, *Ruminococcus bromii*[Bacteroides coprophilus, *Ruminococcus gnavus*[Bacteroides coprophilus, *Ruminococcus lactaris*[Bacteroides coprophilus, *Ruminococcus obeum*[Bacteroides coprophilus, *Ruminococcus torques*[Bacteroides coprophilus, *Selenomonas putigena*[Bacteroides coprophilus, *Shigella boydii*[Bacteroides coprophilus, *Shigella dysenteriae*[Bacteroides coprophilus, *Shigella sonnei*[Bacteroides coprophilus, *Slackia exigua*[Bacteroides coprophilus, *Solobacterium moorei*[Bacteroides coprophilus, *Staphylococcus aureus*[Bacteroides coprophilus, *Staphylococcus epidermidis*[Bacteroides coprophilus, *Staphylococcus hominis*[Bacteroides coprophilus, *Staphylococcus saprophyticus*[Bacteroides coprophilus, *Staphylococcus warneri*[Bacteroides coprophilus, *Streptococcus agalactiae*[Bacteroides coprophilus, *Streptococcus anginosus*[Bacteroides coprophilus, *Streptococcus australis*[Bacteroides coprophilus, *Streptococcus bovis*[Bacteroides coprophilus, *Streptococcus cristatus*[Bacteroides coprophilus, *Streptococcus dysgalactiae*[Bacteroides coprophilus, *Streptococcus equinus*[Bacteroides coprophilus, *Streptococcus gordonii*[Bacteroides coprophilus, *Streptococcus infantarius*[Bacteroides coprophilus, *Streptococcus infantis*[Bacteroides coprophilus, *Streptococcus mitis*[Bacteroides coprophilus, *Streptococcus mutans*[Bacteroides coprophilus, *Streptococcus oralis*[Bacteroides coprophilus, *Streptococcus parasanguinis*[Bacteroides coprophilus, *Streptococcus peroris*[Bacteroides coprophilus, *Streptococcus pneumoniae*[Bacteroides coprophilus, *Streptococcus salivarius*[Bacteroides coprophilus, *Streptococcus sanguinis*[Bacteroides coprophilus, *Streptococcus thermophilus*[Bacteroides coprophilus, *Streptococcus vestibularis*[Bacteroides coprophilus, *Subdoligranulum variable*[Bacteroides coprophilus, *Succinatimonas hippel*[Bacteroides coprophilus, *Sutterella wadsworthensis*[Bacteroides coprophilus, *Tropheryma whippelii*[Bacteroides coprophilus, *Veillonella atypica*[Bacteroides coprophilus, *Veillonella dispar*[Bacteroides coprophilus, *Veillonella parvula*[Bacteroides coprophilus, *Victivallis vadensis*[Bacteroides dorei, *Bacteroides dorei*, *Bacteroides dorei*, *Bacteroides dorei*, *Bacteroides dorei*, *Bacteroides eggerthii*[Bacteroides dorei, *Bacteroides finegoldii*[Bacteroides dorei, *Bacteroides fragilis*[Bacteroides dorei, *Bacteroides helcogenes*[Bacteroides dorei, *Bacteroides intestinalis*[Bacteroides dorei, *Bacteroides ovatus*[Bacteroides dorei, *Bacteroides pectinophilus*[Bacteroides dorei, *Bacteroides plebeius*[Bacteroides dorei, *Bacteroides salanitronis*[Bacteroides dorei, *Bacteroides sp. 1_1_6*[Bacteroides dorei, *Bacteroides sp. 3_1_23*[Bacteroides dorei, *Bacteroides stercoris*[Bacteroides dorei, *Bacteroides thetaiotaomicron*[Bacteroides dorei, *Bacteroides uniformis*[Bacteroides dorei, *Bacteroides vulgatus*[Bacteroides dorei, *Bacteroides xylanisolvens*[Bacteroides dorei, *Bifidobacterium adolescentis*[Bacteroides dorei, *Bifidobacterium angulatum*[Bacteroides dorei, *Bifidobacterium animalis*[Bacteroides dorei, *Bifidobacterium bifidum*[Bacteroides dorei, *Bifidobacterium breve*[Bacteroides dorei, *Bifidobacterium catenulatum*[Bacteroides dorei, *Bifidobacterium dentium*[Bacteroides dorei, *Bifidobacterium infantis*[Bacteroides dorei, *Bifidobacterium longum*[Bacteroides dorei, *Bifidobacterium pseudocatenulatum*[Bacteroides dorei, *Bilophila wadsworthia*[Bacteroides dorei, *Blautia hanseni*[Bacteroides dorei, *Blautia hydrogenotrophica*[Bacteroides dorei, *Blautia producta*[Bacteroides dorei, *Blautia schinkii*[Bacteroides dorei, *Brevibacterium linens*[Bacteroides dorei, *Brucella ceti*[Bacteroides dorei, *Brucella suis*[Bacteroides dorei, *Bulleidia extracta*[Bacteroides dorei, *Butyrivibrio crossotus*[Bacteroides dorei, *Campylobacter concisus*[Bacteroides dorei, *Campylobacter curvus*[Bacteroides dorei, *Campylobacter gracilis*[Bacteroides dorei, *Campylobacter hominis*[Bacteroides dorei, *Capnocytophaga ochracea*[Bacteroides dorei, *Cardiobacterium hominis*[Bacteroides dorei, *Catenibacterium mitsuokai*[Bacteroides dorei, *Catonella morbi*[Bacteroides dorei, *Citrobacter koseri*[Bacteroides dorei, *Clostridium asparagiforme*[Bacteroides dorei, *Clostridium bartlettii*[Bacteroides dorei, *Clostridium boltea*[Bacteroides dorei, *Clostridium botulinum*[Bacteroides dorei, *Clostridium butyricum*[Bacteroides dorei, *Clostridium difficile*[Bacteroides dorei, *Clostridium disporicum*[Bacteroides dorei, *Clostridium hathewayi*[Bacteroides dorei, *Clostridium hylemonae*[Bacteroides dorei, *Clostridium innocuum*[Bacteroides dorei, *Clostridium leptum*[Bacteroides dorei, *Clostridium mayombeii*[Bacteroides dorei, *Clostridium methylpentosum*[Bacteroides dorei, *Clostridium nexile*[Bacteroides dorei, *Clostridium orbiscindens*[Bacteroides dorei, *Clostridium perfringens*[Bacteroides dorei, *Clostridium scindens*[Bacteroides dorei, *Clostridium symbiosum*[Bacteroides dorei, *Clostridium tertium*[Bacteroides dorei, *Clostridium*

116

117

fragilis, Streptococcus infantarius|Bacteroides fragilis, Streptococcus infantis|Bacteroides fragilis, Streptococcus mitis|Bacteroides fragilis, Streptococcus mutans|Bacteroides fragilis, Streptococcus oralis|Bacteroides fragilis, Streptococcus parasanguinis|Bacteroides fragilis, Streptococcus peroris|Bacteroides fragilis, Streptococcus pneumoniae|Bacteroides fragilis, Streptococcus salivarius|Bacteroides fragilis, Streptococcus sanguinis|Bacteroides fragilis, Streptococcus thermophilus|Bacteroides fragilis, Streptococcus vestibularis|Bacteroides fragilis, Subdoligranulum variable|Bacteroides fragilis, Succinatimonas hippei|Bacteroides fragilis, Sutterella wadsworthensis|Bacteroides fragilis, Tropheryma whippelii|Bacteroides fragilis, Veillonella atypica|Bacteroides fragilis, Veillonella dispar|Bacteroides fragilis, Veillonella parvula|Bacteroides fragilis, Victivallis vadensis|Bacteroides fragilis, Bacteroides helcogenes, Bacteroides intestinalis|Bacteroides helcogenes, Bacteroides intestinalis|Bacteroides helcogenes, Bacteroides ovatus|Bacteroides helcogenes, Bacteroides pectinophilus|Bacteroides helcogenes, Bacteroides plebeius|Bacteroides helcogenes, Bacteroides salanitronis|Bacteroides helcogenes, Bacteroides sp. 1_1_6|Bacteroides helcogenes, Bacteroides sp. 3_1_23|Bacteroides helcogenes, Bacteroides stercoris|Bacteroides helcogenes, Bacteroides thetaiotaomicron|Bacteroides helcogenes, Bacteroides uniformis|Bacteroides helcogenes, Bacteroides vulgatus|Bacteroides helcogenes, Bacteroides xylanisolvens|Bacteroides helcogenes, Bifidobacterium adolescentis|Bacteroides helcogenes, Bifidobacterium angulatum|Bacteroides helcogenes, Bifidobacterium animalis|Bacteroides helcogenes, Bifidobacterium bifidum|Bacteroides helcogenes, Bifidobacterium breve|Bacteroides helcogenes, Bifidobacterium catenulatum|Bacteroides helcogenes, Bifidobacterium dentium|Bacteroides helcogenes, Bifidobacterium infantis|Bacteroides helcogenes, Bifidobacterium longum|Bacteroides helcogenes, Bifidobacterium pseudocatenulatum|Bacteroides helcogenes, Bilophila wadsworthia|Bacteroides helcogenes, Blautia hansenii|Bacteroides helcogenes, Blautia hydrogenotrophica|Bacteroides helcogenes, Blautia producta|Bacteroides helcogenes, Blautia schinkii|Bacteroides helcogenes, Brevibacterium linens|Bacteroides helcogenes, Brucella ceti|Bacteroides helcogenes, Brucella suis|Bacteroides helcogenes, Bulleidia extructa|Bacteroides helcogenes, Butyrivibrio crossotus|Bacteroides helcogenes, Campylobacter concisus|Bacteroides helcogenes, Campylobacter curvus|Bacteroides helcogenes, Campylobacter gracilis|Bacteroides helcogenes, Campylobacter hominis|Bacteroides helcogenes, Capnocytophaga ochracea|Bacteroides helcogenes, Cardiobacterium hominis|Bacteroides helcogenes, Catenibacterium mitsuokai|Bacteroides helcogenes, Catonella morbi|Bacteroides helcogenes, Citrobacter koseri|Bacteroides helcogenes, Clostridium asparagiforme|Bacteroides helcogenes, Clostridium bartlettii|Bacteroides helcogenes, Clostridium boltae|Bacteroides helcogenes, Clostridium botulinum|Bacteroides helcogenes, Clostridium butyricum|Bacteroides helcogenes, Clostridium difficile|Bacteroides helcogenes, Clostridium disporicum|Bacteroides helcogenes, Clostridium hathewayi|Bacteroides helcogenes, Clostridium hylemonae|Bacteroides helcogenes, Clostridium innocuum|Bacteroides helcogenes, Clostridium leptum|Bacteroides helcogenes, Clostridium mayombeii|Bacteroides helcogenes, Clostridium methylpentosum|Bacteroides helcogenes, Clostridium nexile|Bacteroides helcogenes, Clostridium orbiscindens|Bacteroides helcogenes, Clostridium perfringens|Bacteroides helcogenes, Clostridium saccharolyticum|Bacteroides helcogenes, Clostridium scindens|Bacteroides helcogenes, Clostridium symbiosum|Bacteroides helcogenes, Clostridium tertium|Bacteroides helcogenes, Collinsella aerofaciens|Bacteroides helcogenes, Collinsella intestinalis|Bacteroides helcogenes, Collinsella stercoris|Bacteroides helcogenes, Coprobacillus sp. D7|Bacteroides helcogenes, Coprococcus catus|Bacteroides helcogenes, Coprococcus comes|Bacteroides helcogenes, Coprococcus eutactus|Bacteroides helcogenes, Corynebacterium aurimucosum|Bacteroides helcogenes, Corynebacterium matruchotii|Bacteroides helcogenes, Cryptobacterium curtum|Bacteroides helcogenes, Desulfovibrio desulfuricans|Bacteroides helcogenes, Desulfovibrio piger|Bacteroides helcogenes, Dialister invisus|Bacteroides helcogenes, Dialister microaerophilus|Bacteroides helcogenes, Dorea formicigenerans|Bacteroides helcogenes, Dorea longicatena|Bacteroides helcogenes, Eggerthella lenta|Bacteroides helcogenes, Eikenella corrodens|Bacteroides helcogenes, Enterobacter cancerogenus|Bacteroides helcogenes, Enterobacter cloacae|Bacteroides helcogenes, Enterococcus faecalis|Bacteroides helcogenes, Enterococcus faecium|Bacteroides helcogenes, Enterococcus gallinarum|Bacteroides helcogenes, Erysipelotrichaceae bacterium 3_1_53|Bacteroides helcogenes, Escherichia coli|Bacteroides helcogenes, Escherichia fergusonii|Bacteroides helcogenes, Ethanoligenens harbinense|Bacteroides helcogenes, Eubacterium cellulosolvens|Bacteroides helcogenes, Eubacterium eligens|Bacteroides helcogenes, Eubacterium hallii|Bacteroides helcogenes, Eubacterium limosum|Bacteroides helcogenes, Eubacterium rectale|Bacteroides helcogenes, Eubacterium siraeum|Bacteroides helcogenes, Eubacterium ventriosum|Bacteroides helcogenes, Faecalibacterium prausnitzii|Bacteroides helcogenes, Finegoldia magna|Bacteroides helcogenes, Fusobacterium gonidiaformans|Bacteroides helcogenes, Fusobacterium mortiferum|Bacteroides helcogenes, Fusobacterium nucleatum|Bacteroides helcogenes, Fusobacterium varium|Bacteroides helcogenes, Gardnerella vaginalis|Bacteroides helcogenes, Gemella haemolysans|Bacteroides helcogenes, Gemella morbillorum|Bacteroides helcogenes, Gordonibacter pamelaeae|Bacteroides helcogenes, Granulicatella adiacens|Bacteroides helcogenes, Granulicatella elegans|Bacteroides helcogenes, Haemophilus influenzae|Bacteroides helcogenes, Haemophilus parainfluenzae|Bacteroides helcogenes, Helicobacter pylori|Bacteroides helcogenes, Helicobacter pylori|Bacteroides helcogenes, Klebsiella pneumoniae|Bacteroides helcogenes, Klebsiella varicola|Bacteroides helcogenes, Lachnospiraceae bacterium 5_1_57FAA|Bacteroides helcogenes, Lactobacillus acidophilus|Bacteroides helcogenes, Lactobacillus amylovorus|Bacteroides helcogenes, Lactobacillus brevis|Bacteroides helcogenes, Lactobacillus casei|Bacteroides helcogenes, Lactobacillus crispatus|Bacteroides helcogenes, Lactobacillus delbrueckii|Bacteroides helcogenes, Lactobacillus fermentum|Bacteroides helcogenes, Lactobacillus gasseri|Bacteroides helcogenes, Lactobacillus iners|Bacteroides helcogenes, Lactobacillus johnsonii|Bacteroides helcogenes, Lactobacillus paracasei|Bacteroides helcogenes, Lactobacillus plantarum|Bacteroides helcogenes, Lactobacillus reuteri|Bacteroides helcogenes, Lactobacillus rhamnosus|Bacteroides helcogenes, Lactobacillus ruminis|Bacteroides helcogenes, Lactobacillus sakei|Bacteroides helcogenes, Lactobacillus salivarius|Bacteroides helcogenes, Lactococcus lactis|Bacteroides helcogenes, Lautropia mirabilis|Bacteroides helcogenes, Leuconostoc citreum|Bacteroides helcogenes, Leuconostoc gasiconitum|Bacteroides helcogenes, Leuconostoc mesenteroides|Bacteroides helcogenes, Listeria monocytogenes|Bacteroides helcogenes, Marvinbryantia formatexigens|Bacteroides helcogenes, Megamonas hypermegale|Bacteroides helcogenes, Megaphaera micronciformis|Bacteroides helcogenes, Methanobrevibacter smithii|Bacteroides helcogenes, Methanospaera stadmanae|Bacteroides helcogenes, Methylobacterium radiotolerans|Bacteroides helcogenes, Mitsuokella multacida|Bacteroides helcogenes, Mobiluncus curtisii|Bacteroides helcogenes, Mycoplasma hominis|Bacteroides helcogenes, Neisseria mucosa|Bacteroides helcogenes, Odoribacter splanchnicus|Bacteroides helcogenes, Olsenella uli|Bacteroides helcogenes, Oribacterium sinus|Bacteroides helcogenes, Oxalobacter formigenes|Bacteroides helcogenes, Parabacteroides distansoni|Bacteroides helcogenes, Parabacteroides johnsonii|Bacteroides helcogenes, Parabacteroides merdae|Bacteroides helcogenes, Parvimonas micra|Bacteroides helcogenes, Pedicoccus acidilactici|Bacteroides helcogenes, Pedicoccus pentosaceus|Bacteroides helcogenes, Peptoniphilus duerdenii|Bacteroides helcogenes, Peptoniphilus harei|Bacteroides helcogenes, Peptoniphilus lactinalis|Bacteroides helcogenes, Peptostreptococcus anaerobius|Bacteroides helcogenes, Peptostreptococcus stomatis|Bacteroides helcogenes, Porphyromonas asaccharolytica|Bacteroides helcogenes, Porphyromonas uenonis|Bacteroides helcogenes, Prevotella amnii|Bacteroides helcogenes, Prevotella bergensis|Bacteroides helcogenes, Prevotella bivia|Bacteroides helcogenes, Prevotella buccae|Bacteroides helcogenes, Prevotella buccalis|Bacteroides helcogenes, Prevotella copri|Bacteroides helcogenes, Prevotella disiens|Bacteroides helcogenes, Prevotella melaninogenica|Bacteroides helcogenes, Prevotella multiformis|Bacteroides helcogenes, Prevotella oralis|Bacteroides helcogenes, Prevotella oris|Bacteroides helcogenes, Prevotella salivae|Bacteroides helcogenes, Prevotella timonensis|Bacteroides helcogenes, Propionibacterium acnes|Bacteroides helcogenes, Propionibacterium freudenreichii|Bacteroides helcogenes, Proteus mirabilis|Bacteroides helcogenes, Proteus penneri|Bacteroides helcogenes, Pseudoflavonifractor capillosus|Bacteroides helcogenes, Pseudomonas aeruginosa|Bacteroides helcogenes, Pseudomonas fluorescens|Bacteroides helcogenes, Pseudomonas putida|Bacteroides helcogenes, Pseudoramibacter alactolyticus|Bacteroides helcogenes, Pyramidobacter piscoloris|Bacteroides helcogenes, Rhodospseudomonas palustris|Bacteroides helcogenes, Roseburia intestinalis|Bacteroides helcogenes, Roseburia inulinivorans|Bacteroides helcogenes, Rothia dentocariosa|Bacteroides helcogenes, Rothia mucilaginosa|Bacteroides helcogenes, Ruminococcus albus|Bacteroides helcogenes, Ruminococcus bromii|Bacteroides helcogenes, Ruminococcus gnavus|Bacteroides helcogenes, Ruminococcus lactaris|Bacteroides helcogenes, Ruminococcus obeum|Bacteroides helcogenes, Ruminococcus torques|Bacteroides helcogenes, Selenomonas sputigena|Bacteroides helcogenes, Shigella boydii|Bacteroides helcogenes, Shigella dysenteriae|Bacteroides helcogenes, Shigella sonnei|Bacteroides helcogenes, Slackia exigua|Bacteroides helcogenes, Solobacterium moorei|Bacteroides helcogenes, Staphylococcus aureus|Bacteroides helcogenes, Staphylococcus epidermidis|Bacteroides helcogenes, Staphylococcus hominis|Bacteroides helcogenes, Staphylococcus saprophyticus|Bacteroides helcogenes, Staphylococcus warneri|Bacteroides helcogenes, Streptococcus agalactiae|Bacteroides helcogenes, Streptococcus anginosus|Bacteroides helcogenes, Streptococcus australis|Bacteroides helcogenes, Streptococcus bovis|Bacteroides helcogenes, Streptococcus cristatus|Bacteroides helcogenes, Streptococcus dysgalactiae|Bacteroides helcogenes, Streptococcus equinus|Bacteroides helcogenes, Streptococcus gordonii|Bacteroides helcogenes, Streptococcus infantarius|Bacteroides helcogenes, Streptococcus infantis|Bacteroides helcogenes, Streptococcus mitis|Bacteroides helcogenes, Streptococcus mutans|Bacteroides helcogenes, Streptococcus oralis|Bacteroides helcogenes, Streptococcus parasanguinis|Bacteroides helcogenes, Streptococcus peroris|Bacteroides helcogenes, Streptococcus pneumoniae|Bacteroides helcogenes, Streptococcus salivarius|Bacteroides helcogenes, Streptococcus sanguinis|Bacteroides helcogenes, Streptococcus thermophilus|Bacteroides helcogenes, Streptococcus vestibularis|Bacteroides helcogenes, Subdoligranulum variable|Bacteroides helcogenes, Succinatimonas hippei|Bacteroides helcogenes, Sutterella wadsworthensis|Bacteroides helcogenes, Tropheryma whippelii|Bacteroides helcogenes, Veillonella atypica|Bacteroides helcogenes, Veillonella dispar|Bacteroides helcogenes, Veillonella parvula|Bacteroides helcogenes, Victivallis vadensis|Bacteroides intestinalis, Bacteroides intestinalis|Bacteroides intestinalis, Bacteroides intestinalis|Bacteroides intestinalis, Bacteroides ovatus|Bacteroides intestinalis, Bacteroides pectinophilus|Bacteroides intestinalis, Bacteroides plebeius|Bacteroides intestinalis, Bacteroides salanitronis|Bacteroides intestinalis, Bacteroides sp. 1_1_6|Bacteroides intestinalis, Bacteroides sp. 3_1_23|Bacteroides intestinalis, Bacteroides stercoris|Bacteroides intestinalis, Bacteroides thetaiotaomicron|Bacteroides intestinalis, Bacteroides uniformis|Bacteroides intestinalis, Bacteroides vulgatus|Bacteroides intestinalis, Bacteroides xylanisolvens|Bacteroides intestinalis, Bifidobacterium adolescentis|Bacteroides intestinalis, Bifidobacterium angulatum|Bacteroides intestinalis, Bifidobacterium animalis|Bacteroides intestinalis, Bifidobacterium bifidum|Bacteroides intestinalis, Bifidobacterium breve|Bacteroides intestinalis, Bifidobacterium catenulatum|Bacteroides intestinalis, Bifidobacterium dentium|Bacteroides intestinalis, Bifidobacterium infantis|Bacteroides intestinalis, Bifidobacterium longum|Bacteroides intestinalis, Bifidobacterium pseudocatenulatum|Bacteroides intestinalis, Bilophila wadsworthia|Bacteroides intestinalis, Blautia hansenii|Bacteroides intestinalis, Blautia hydrogenotrophica|Bacteroides intestinalis, Blautia producta|Bacteroides intestinalis, Blautia schinkii|Bacteroides intestinalis, Brevibacterium linens|Bacteroides intestinalis, Brucella ceti|Bacteroides intestinalis, Brucella suis|Bacteroides intestinalis, Bulleidia extructa|Bacteroides intestinalis, Butyrivibrio crossotus|Bacteroides intestinalis, Campylobacter concisus|Bacteroides intestinalis, Campylobacter curvus|Bacteroides intestinalis, Campylobacter gracilis|Bacteroides intestinalis, Campylobacter hominis|Bacteroides intestinalis, Capnocytophaga ochracea|Bacteroides intestinalis, Cardiobacterium hominis|Bacteroides intestinalis, Catenibacterium mitsuokai|Bacteroides intestinalis, Catonella morbi|Bacteroides intestinalis, Citrobacter koseri|Bacteroides intestinalis, Clostridium asparagiforme|Bacteroides intestinalis, Clostridium difficile|Bacteroides intestinalis, Clostridium disporicum|Bacteroides intestinalis, Clostridium hathewayi|Bacteroides intestinalis, Clostridium hylemonae|Bacteroides intestinalis, Clostridium innocuum|Bacteroides intestinalis, Clostridium leptum|Bacteroides intestinalis, Clostridium mayombeii|Bacteroides intestinalis, Clostridium methylpentosum|Bacteroides intestinalis, Clostridium nexile|Bacteroides intestinalis, Clostridium orbiscindens|Bacteroides intestinalis, Clostridium perfringens|Bacteroides intestinalis, Clostridium saccharolyticum|Bacteroides intestinalis, Clostridium scindens|Bacteroides intestinalis, Clostridium symbiosum|Bacteroides intestinalis, Clostridium tertium|Bacteroides intestinalis, Collinsella aerofaciens|Bacteroides intestinalis, Collinsella intestinalis|Bacteroides intestinalis, Collinsella stercoris|Bacteroides intestinalis, Coprobacillus sp. D7|Bacteroides intestinalis, Coprococcus catus|Bacteroides intestinalis, Coprococcus comes|Bacteroides intestinalis, Coprococcus eutactus|Bacteroides intestinalis, Corynebacterium aurimucosum|Bacteroides intestinalis, Corynebacterium matruchotii|Bacteroides intestinalis, Cryptobacterium curtum|Bacteroides intestinalis, Desulfovibrio desulfuricans|Bacteroides intestinalis, Desulfovibrio piger|Bacteroides intestinalis, Dialister invisus|Bacteroides intestinalis, Dialister microaerophilus|Bacteroides intestinalis, Dorea formicigenerans|Bacteroides intestinalis, Dorea longicatena|Bacteroides intestinalis, Eggerthella lenta|Bacteroides intestinalis, Eikenella corrodens|Bacteroides intestinalis, Enterobacter cancerogenus|Bacteroides intestinalis, Enterobacter cloacae|Bacteroides intestinalis, Enterococcus faecalis|Bacteroides intestinalis, Enterococcus faecium|Bacteroides intestinalis, Enterococcus gallinarum|Bacteroides intestinalis, Erysipelotrichaceae bacterium 3_1_53|Bacteroides intestinalis, Escherichia coli|Bacteroides intestinalis, Escherichia fergusonii|Bacteroides intestinalis, Ethanoligenens harbinense|Bacteroides intestinalis, Eubacterium cellulosolvens|Bacteroides intestinalis, Eubacterium eligens|Bacteroides intestinalis, Eubacterium hallii|Bacteroides intestinalis, Eubacterium limosum|Bacteroides intestinalis, Eubacterium rectale|Bacteroides intestinalis, Eubacterium siraeum|Bacteroides intestinalis, Eubacterium ventriosum|Bacteroides intestinalis, Faecalibacterium prausnitzii|Bacteroides intestinalis, Finegoldia magna|Bacteroides intestinalis, Fusobacterium gonidiaformans|Bacteroides intestinalis, Fusobacterium mortiferum|Bacteroides intestinalis, Fusobacterium nucleatum|Bacteroides intestinalis, Fusobacterium varium|Bacteroides intestinalis, Gardnerella vaginalis|Bacteroides intestinalis, Gemella haemolysans|Bacteroides intestinalis, Gemella morbillorum|Bacteroides intestinalis, Gordonibacter pamelaeae|Bacteroides intestinalis, Granulicatella adiacens|Bacteroides intestinalis, Granulicatella elegans|Bacteroides intestinalis, Haemophilus influenzae|Bacteroides intestinalis, Haemophilus parainfluenzae|Bacteroides intestinalis, Helicobacter pylori|Bacteroides intestinalis, Helicobacter pylori|Bacteroides intestinalis, Holdemania filiformis|Bacteroides intestinalis, Kingella oralis|Bacteroides intestinalis, Klebsiella pneumoniae|Bacteroides intestinalis, Klebsiella varicola|Bacteroides intestinalis, Lachnospiraceae bacterium 5_1_57FAA|Bacteroides intestinalis, Lactobacillus acidophilus|Bacteroides intestinalis, Lactobacillus amylovorus|Bacteroides intestinalis, Lactobacillus brevis|Bacteroides intestinalis, Lactobacillus casei|Bacteroides intestinalis, Lactobacillus crispatus|Bacteroides intestinalis, Lactobacillus delbrueckii|Bacteroides intestinalis, Lactobacillus fermentum|Bacteroides intestinalis, Lactobacillus gasseri|Bacteroides intestinalis, Lactobacillus iners|Bacteroides intestinalis, Lactobacillus johnsonii|Bacteroides intestinalis, Lactobacillus paracasei|Bacteroides intestinalis, Lactobacillus plantarum|Bacteroides intestinalis, Lactobacillus reuteri|Bacteroides intestinalis, Lactobacillus rhamnosus|Bacteroides intestinalis, Lactobacillus ruminis|Bacteroides intestinalis, Lactococcus lactis|Bacteroides intestinalis, Lautropia mirabilis|Bacteroides intestinalis, Leuconostoc citreum|Bacteroides intestinalis, Leuconostoc gasiconitum|Bacteroides intestinalis, Leuconostoc mesenteroides|Bacteroides intestinalis, Listeria monocytogenes|Bacteroides intestinalis, Marvinbryantia formatexigens|Bacteroides intestinalis, Megamonas hypermegale|Bacteroides intestinalis, Megaphaera micronciformis|Bacteroides intestinalis, Methanobrevibacter smithii|Bacteroides intestinalis, Methanospaera stadmanae|Bacteroides intestinalis, Methylobacterium radiotolerans|Bacteroides intestinalis, Mitsuokella multacida|Bacteroides intestinalis, Mobiluncus curtisii|Bacteroides intestinalis, Mycoplasma hominis|Bacteroides intestinalis, Neisseria mucosa|Bacteroides intestinalis, Odoribacter splanchnicus|Bacteroides intestinalis, Olsenella uli|Bacteroides intestinalis, Oribacterium

119

salanitronis, Clostridium orbiscindens|Bacteroides salanitronis, Clostridium perfringens|Bacteroides salanitronis, Clostridium saccharolyticum|Bacteroides salanitronis, Clostridium scindens|Bacteroides salanitronis, Clostridium symbiosum|Bacteroides salanitronis, Clostridium tertium|Bacteroides salanitronis, Collinsella aerofaciens|Bacteroides salanitronis, Collinsella intestinalis|Bacteroides salanitronis, Collinsella stercoris|Bacteroides salanitronis, Coprobacillus sp. D7|Bacteroides salanitronis, Coprococcus catus|Bacteroides salanitronis, Coprococcus comes|Bacteroides salanitronis, Coprococcus eutactus|Bacteroides salanitronis, Corynebacterium aurimucosum|Bacteroides salanitronis, Corynebacterium matruchotii|Bacteroides salanitronis, Cryptobacterium curtum|Bacteroides salanitronis, Desulfovibrio desulfuricans|Bacteroides salanitronis, Desulfovibrio piger|Bacteroides salanitronis, Dialister invisus|Bacteroides salanitronis, Dialister microaerophilus|Bacteroides salanitronis, Dorea formicigenerans|Bacteroides salanitronis, Dorea longicatena|Bacteroides salanitronis, Eggerthella lenta|Bacteroides salanitronis, Eikenella corrodens|Bacteroides salanitronis, Enterobacter cancerogenus|Bacteroides salanitronis, Enterobacter cloacae|Bacteroides salanitronis, Enterococcus faecalis|Bacteroides salanitronis, Enterococcus faecium|Bacteroides salanitronis, Enterococcus gallinarum|Bacteroides salanitronis, Erysipelotrichaceae bacterium 3_1_53|Bacteroides salanitronis, Escherichia coli|Bacteroides salanitronis, Escherichia fergusonii|Bacteroides salanitronis, Ethanoligenens harbinensis|Bacteroides salanitronis, Eubacterium cellulosolvens|Bacteroides salanitronis, Eubacterium eligens|Bacteroides salanitronis, Eubacterium hallii|Bacteroides salanitronis, Eubacterium limosum|Bacteroides salanitronis, Eubacterium rectale|Bacteroides salanitronis, Eubacterium siraeum|Bacteroides salanitronis, Eubacterium ventriosum|Bacteroides salanitronis, Faecalibacterium prausnitzii|Bacteroides salanitronis, Finegoldia magna|Bacteroides salanitronis, Fusobacterium gonidiaformans|Bacteroides salanitronis, Fusobacterium mortiferum|Bacteroides salanitronis, Fusobacterium nucleatum|Bacteroides salanitronis, Fusobacterium varium|Bacteroides salanitronis, Gardnerella vaginalis|Bacteroides salanitronis, Gemella haemolysans|Bacteroides salanitronis, Gemella morbillorum|Bacteroides salanitronis, Gordonibacter pamelaiae|Bacteroides salanitronis, Granulicatella adiacens|Bacteroides salanitronis, Granulicatella elegans|Bacteroides salanitronis, Haemophilus influenzae|Bacteroides salanitronis, Haemophilus parainfluenzae|Bacteroides salanitronis, Helicobacter pullorum|Bacteroides salanitronis, Helicobacter pylori|Bacteroides salanitronis, Holdemania filiformis|Bacteroides salanitronis, Kingella ornalis|Bacteroides salanitronis, Klebsiella pneumoniae|Bacteroides salanitronis, Klebsiella variicola|Bacteroides salanitronis, Lachnospiraceae bacterium 5_1_57FAA|Bacteroides salanitronis, Lactobacillus acidophilus|Bacteroides salanitronis, Lactobacillus amylovorus|Bacteroides salanitronis, Lactobacillus brevis|Bacteroides salanitronis, Lactobacillus casei|Bacteroides salanitronis, Lactobacillus crispatus|Bacteroides salanitronis, Lactobacillus delbrueckii|Bacteroides salanitronis, Lactobacillus fermentum|Bacteroides salanitronis, Lactobacillus gasseri|Bacteroides salanitronis, Lactobacillus iners|Bacteroides salanitronis, Lactobacillus jensenii|Bacteroides salanitronis, Lactobacillus johnsonii|Bacteroides salanitronis, Lactobacillus paracasei|Bacteroides salanitronis, Lactobacillus plantarum|Bacteroides salanitronis, Lactobacillus reuteri|Bacteroides salanitronis, Lactobacillus rhamnosus|Bacteroides salanitronis, Lactobacillus ruminis|Bacteroides salanitronis, Lactobacillus sakei|Bacteroides salanitronis, Lactobacillus salivarius|Bacteroides salanitronis, Lactococcus lactis|Bacteroides salanitronis, Lautropia mirabilis|Bacteroides salanitronis, Leuconostoc citreum|Bacteroides salanitronis, Leuconostoc gasicomitatum|Bacteroides salanitronis, Leuconostoc mesenteroides|Bacteroides salanitronis, Listeria monocytogenes|Bacteroides salanitronis, Listeria monocytogenes|Bacteroides salanitronis, Marvibryantia formatexigens|Bacteroides salanitronis, Megamonas hypermegale|Bacteroides salanitronis, Megaspheara micromorfismis|Bacteroides salanitronis, Methanobrevibacter smithii|Bacteroides salanitronis, Methanospheara stadtmannae|Bacteroides salanitronis, Methylobacterium radiotolerans|Bacteroides salanitronis, Mitsukella multacida|Bacteroides salanitronis, Mobiluncus curtisii|Bacteroides salanitronis, Mycoplasma hominis|Bacteroides salanitronis, Neisseria mucosa|Bacteroides salanitronis, Odoribacter splanchnicus|Bacteroides salanitronis, Olsenella ulii|Bacteroides salanitronis, Oribacterium sinus|Bacteroides salanitronis, Oxalobacter formigenes|Bacteroides salanitronis, Parabacteroides distasonis|Bacteroides salanitronis, Parabacteroides johnsonii|Bacteroides salanitronis, Parabacteroides merdae|Bacteroides salanitronis, Parvimonas micra|Bacteroides salanitronis, Pediococcus acidilactici|Bacteroides salanitronis, Pediococcus pentosaceus|Bacteroides salanitronis, Peptoniphilus duerdenii|Bacteroides salanitronis, Peptoniphilus harei|Bacteroides salanitronis, Peptoniphilus lacrimalis|Bacteroides salanitronis, Peptostreptococcus anaerobius|Bacteroides salanitronis, Peptostreptococcus stomatis|Bacteroides salanitronis, Porphyromonas asaccharolytica|Bacteroides salanitronis, Porphyromonas unonis|Bacteroides salanitronis, Prevotella amnii|Bacteroides salanitronis, Prevotella bergensis|Bacteroides salanitronis, Prevotella bivia|Bacteroides salanitronis, Prevotella buccae|Bacteroides salanitronis, Prevotella buccalis|Bacteroides salanitronis, Prevotella copri|Bacteroides salanitronis, Prevotella disiens|Bacteroides salanitronis, Prevotella melaninogenica|Bacteroides salanitronis, Prevotella multiformis|Bacteroides salanitronis, Prevotella oralis|Bacteroides salanitronis, Prevotella oris|Bacteroides salanitronis, Prevotella salivaria|Bacteroides salanitronis, Prevotella timonensis|Bacteroides salanitronis, Propionibacterium acnes|Bacteroides salanitronis, Propionibacterium freudenreichii|Bacteroides salanitronis, Proteus mirabilis|Bacteroides salanitronis, Proteus penneri|Bacteroides salanitronis, Pseudoflavonifractor capillosus|Bacteroides salanitronis, Pseudomonas aeruginosa|Bacteroides salanitronis, Pseudomonas fluorescens|Bacteroides salanitronis, Pseudomonas putida|Bacteroides salanitronis, Pseudorambacter alactolyticus|Bacteroides salanitronis, Pyramidobacter piscosolens|Bacteroides salanitronis, Rhodopseudomonas palustris|Bacteroides salanitronis, Roseburia intestinalis|Bacteroides salanitronis, Roseburia inulinivorans|Bacteroides salanitronis, Rothia dentocariosa|Bacteroides salanitronis, Rothia mucilaginosa|Bacteroides salanitronis, Ruminococcus albus|Bacteroides salanitronis, Ruminococcus bromii|Bacteroides salanitronis, Ruminococcus gnavus|Bacteroides salanitronis, Ruminococcus lactaris|Bacteroides salanitronis, Ruminococcus obeum|Bacteroides salanitronis, Ruminococcus torques|Bacteroides salanitronis, Selenomonas sputigena|Bacteroides salanitronis, Shigella boydii|Bacteroides salanitronis, Shigella dysenteriae|Bacteroides salanitronis, Shigella sonnei|Bacteroides salanitronis, Slackia exigua|Bacteroides salanitronis, Solobacterium moorei|Bacteroides salanitronis, Staphylococcus aureus|Bacteroides salanitronis, Staphylococcus epidermidis|Bacteroides salanitronis, Staphylococcus hominis|Bacteroides salanitronis, Staphylococcus saprophyticus|Bacteroides salanitronis, Staphylococcus warneri|Bacteroides salanitronis, Streptococcus agalactiae|Bacteroides salanitronis, Streptococcus anginosus|Bacteroides salanitronis, Streptococcus australis|Bacteroides salanitronis, Streptococcus bovis|Bacteroides salanitronis, Streptococcus cristatus|Bacteroides salanitronis, Streptococcus dysgalactiae|Bacteroides salanitronis, Streptococcus equinus|Bacteroides salanitronis, Streptococcus gordonii|Bacteroides salanitronis, Streptococcus infantarius|Bacteroides salanitronis, Streptococcus infantilis|Bacteroides salanitronis, Streptococcus mitis|Bacteroides salanitronis, Streptococcus mutans|Bacteroides salanitronis, Streptococcus oralis|Bacteroides salanitronis, Streptococcus parasanguinis|Bacteroides salanitronis, Streptococcus peroris|Bacteroides salanitronis, Streptococcus pneumoniae|Bacteroides salanitronis, Streptococcus salivarius|Bacteroides salanitronis, Streptococcus sanguinis|Bacteroides salanitronis, Streptococcus thermophilus|Bacteroides salanitronis, Streptococcus vestibularis|Bacteroides salanitronis, Subdoligranulum variabile|Bacteroides salanitronis, Succinatimonas hippei|Bacteroides salanitronis, Sutterella wadsworthensis|Bacteroides salanitronis, Tropheryma whippelii|Bacteroides salanitronis, Veillonella atypica|Bacteroides salanitronis, Veillonella dispar|Bacteroides salanitronis, Veillonella parvula|Bacteroides salanitronis, Victivallis vadensis|Bacteroides sp. 1_1_6, Bacteroides sp. 1_1_6, Bacteroides sp. 1_1_6, Bacteroides sp. 3_1_23|Bacteroides sp. 1_1_6, Bacteroides stercoris|Bacteroides sp. 1_1_6, Bacteroides thetaiotaomicron|Bacteroides sp. 1_1_6, Bacteroides uniformis|Bacteroides sp. 1_1_6, Bacteroides vulgatus|Bacteroides sp. 1_1_6, Bacteroides xylanisolvens|Bacteroides sp. 1_1_6, Bifidobacterium adolescentis|Bacteroides sp. 1_1_6, Bifidobacterium angulatum|Bacteroides sp. 1_1_6, Bifidobacterium animalis|Bacteroides sp. 1_1_6, Bifidobacterium bifidum|Bacteroides sp. 1_1_6, Bifidobacterium breve|Bacteroides sp. 1_1_6, Bifidobacterium catenulatum|Bacteroides sp. 1_1_6, Bifidobacterium dentium|Bacteroides sp. 1_1_6, Bifidobacterium infantis|Bacteroides sp. 1_1_6, Bifidobacterium longum|Bacteroides sp. 1_1_6, Bifidobacterium pseudocatenulatum|Bacteroides sp. 1_1_6, Bilophila wadsworthia|Bacteroides sp. 1_1_6, Blautia hanseni|Bacteroides sp. 1_1_6, Blautia hydrogenotrophica|Bacteroides sp. 1_1_6, Blautia producta|Bacteroides sp. 1_1_6, Blautia schinkii|Bacteroides sp. 1_1_6, Brevibacterium linens|Bacteroides sp. 1_1_6, Brucella cetii|Bacteroides sp. 1_1_6, Brucella suis|Bacteroides sp. 1_1_6, Bulleidia extructa|Bacteroides sp. 1_1_6, Butyrivibrio crossotus|Bacteroides sp. 1_1_6, Campylobacter concisus|Bacteroides sp. 1_1_6, Campylobacter curvus|Bacteroides sp. 1_1_6, Campylobacter faecalis|Bacteroides sp. 1_1_6, Campylobacter hominis|Bacteroides sp. 1_1_6, Capnocytophaga ochracea|Bacteroides sp. 1_1_6, Cardiobacterium hominis|Bacteroides sp. 1_1_6, Catenibacterium mitsukoi|Bacteroides sp. 1_1_6, Catonella morbi|Bacteroides sp. 1_1_6, Citrobacter koseri|Bacteroides sp. 1_1_6, Clostridium asparagiforme|Bacteroides sp. 1_1_6, Clostridium bartlettii|Bacteroides sp. 1_1_6, Clostridium boltea|Bacteroides sp. 1_1_6, Clostridium botulinum|Bacteroides sp. 1_1_6, Clostridium butyricum|Bacteroides sp. 1_1_6, Clostridium difficile|Bacteroides sp. 1_1_6, Clostridium disporicum|Bacteroides sp. 1_1_6, Clostridium hathewayi|Bacteroides sp. 1_1_6, Clostridium hylemonae|Bacteroides sp. 1_1_6, Clostridium innocuum|Bacteroides sp. 1_1_6, Clostridium leptum|Bacteroides sp. 1_1_6, Clostridium mayombeyi|Bacteroides sp. 1_1_6, Clostridium methylpentosum|Bacteroides sp. 1_1_6, Clostridium nexile|Bacteroides sp. 1_1_6, Clostridium orbiscindens|Bacteroides sp. 1_1_6, Clostridium perfringens|Bacteroides sp. 1_1_6, Clostridium saccharolyticum|Bacteroides sp. 1_1_6, Clostridium scindens|Bacteroides sp. 1_1_6, Clostridium symbiosum|Bacteroides sp. 1_1_6, Clostridium tertium|Bacteroides sp. 1_1_6, Collinsella aerofaciens|Bacteroides sp. 1_1_6, Collinsella intestinalis|Bacteroides sp. 1_1_6, Collinsella stercoris|Bacteroides sp. 1_1_6, Coprobacillus sp. D7|Bacteroides sp. 1_1_6, Coprococcus catus|Bacteroides sp. 1_1_6, Coprococcus comes|Bacteroides sp. 1_1_6, Coprococcus eutactus|Bacteroides sp. 1_1_6, Corynebacterium aurimucosum|Bacteroides sp. 1_1_6, Corynebacterium matruchotii|Bacteroides sp. 1_1_6, Cryptobacterium curtum|Bacteroides sp. 1_1_6, Desulfovibrio desulfuricans|Bacteroides sp. 1_1_6, Desulfovibrio piger|Bacteroides sp. 1_1_6, Dialister invisus|Bacteroides sp. 1_1_6, Dialister microaerophilus|Bacteroides sp. 1_1_6, Dorea formicigenerans|Bacteroides sp. 1_1_6, Dorea longicatena|Bacteroides sp. 1_1_6, Eggerthella lenta|Bacteroides sp. 1_1_6, Eikenella corrodens|Bacteroides sp. 1_1_6, Enterobacter cancerogenus|Bacteroides sp. 1_1_6, Enterobacter cloacae|Bacteroides sp. 1_1_6, Enterococcus faecalis|Bacteroides sp. 1_1_6, Enterococcus faecium|Bacteroides sp. 1_1_6, Erysipelotrichaceae bacterium 3_1_53|Bacteroides sp. 1_1_6, Escherichia coli|Bacteroides sp. 1_1_6, Escherichia fergusonii|Bacteroides sp. 1_1_6, Ethanoligenens harbinensis|Bacteroides sp. 1_1_6, Eubacterium cellulosolvens|Bacteroides sp. 1_1_6, Eubacterium eligens|Bacteroides sp. 1_1_6, Eubacterium hallii|Bacteroides sp. 1_1_6, Eubacterium limosum|Bacteroides sp. 1_1_6, Eubacterium rectale|Bacteroides sp. 1_1_6, Eubacterium siraeum|Bacteroides sp. 1_1_6, Eubacterium ventriosum|Bacteroides sp. 1_1_6, Faecalibacterium prausnitzii|Bacteroides sp. 1_1_6, Finegoldia magna|Bacteroides sp. 1_1_6, Fusobacterium gonidiaformans|Bacteroides sp. 1_1_6, Fusobacterium mortiferum|Bacteroides sp. 1_1_6, Fusobacterium nucleatum|Bacteroides sp. 1_1_6, Fusobacterium varium|Bacteroides sp. 1_1_6, Gardnerella vaginalis|Bacteroides sp. 1_1_6, Gemella haemolysans|Bacteroides sp. 1_1_6, Gemella morbillorum|Bacteroides sp. 1_1_6, Gordonibacter pamelaiae|Bacteroides sp. 1_1_6, Granulicatella adiacens|Bacteroides sp. 1_1_6, Granulicatella elegans|Bacteroides sp. 1_1_6, Haemophilus influenzae|Bacteroides sp. 1_1_6, Haemophilus parainfluenzae|Bacteroides sp. 1_1_6, Helicobacter pullorum|Bacteroides sp. 1_1_6, Helicobacter pylori|Bacteroides sp. 1_1_6, Holdemania filiformis|Bacteroides sp. 1_1_6, Kingella oralis|Bacteroides sp. 1_1_6, Klebsiella pneumoniae|Bacteroides sp. 1_1_6, Klebsiella variicola|Bacteroides sp. 1_1_6, Lachnospiraceae bacterium 5_1_57FAA|Bacteroides sp. 1_1_6, Lactobacillus acidophilus|Bacteroides sp. 1_1_6, Lactobacillus amylovorus|Bacteroides sp. 1_1_6, Lactobacillus brevis|Bacteroides sp. 1_1_6, Lactobacillus casei|Bacteroides sp. 1_1_6, Lactobacillus crispatus|Bacteroides sp. 1_1_6, Lactobacillus delbrueckii|Bacteroides sp. 1_1_6, Lactobacillus fermentum|Bacteroides sp. 1_1_6, Lactobacillus gasseri|Bacteroides sp. 1_1_6, Lactobacillus iners|Bacteroides sp. 1_1_6, Lactobacillus jensenii|Bacteroides sp. 1_1_6, Lactobacillus johnsonii|Bacteroides sp. 1_1_6, Lactobacillus paracasei|Bacteroides sp. 1_1_6, Lactobacillus plantarum|Bacteroides sp. 1_1_6, Lactobacillus reuteri|Bacteroides sp. 1_1_6, Lactobacillus rhamnosus|Bacteroides sp. 1_1_6, Lactobacillus ruminis|Bacteroides sp. 1_1_6, Lactobacillus sakei|Bacteroides sp. 1_1_6, Lactobacillus salivarius|Bacteroides sp. 1_1_6, Lactococcus lactis|Bacteroides sp. 1_1_6, Lautropia mirabilis|Bacteroides sp. 1_1_6, Leuconostoc citreum|Bacteroides sp. 1_1_6, Leuconostoc gasicomitatum|Bacteroides sp. 1_1_6, Leuconostoc mesenteroides|Bacteroides sp. 1_1_6, Listeria monocytogenes|Bacteroides sp. 1_1_6, Marvibryantia formatexigens|Bacteroides sp. 1_1_6, Megamonas hypermegale|Bacteroides sp. 1_1_6, Megaspheara micromorfismis|Bacteroides sp. 1_1_6, Methanobrevibacter smithii|Bacteroides sp. 1_1_6, Methanospheara stadtmannae|Bacteroides sp. 1_1_6, Methylobacterium radiotolerans|Bacteroides sp. 1_1_6, Mitsukella multacida|Bacteroides sp. 1_1_6, Mobiluncus curtisii|Bacteroides sp. 1_1_6, Mycoplasma hominis|Bacteroides sp. 1_1_6, Neisseria mucosa|Bacteroides sp. 1_1_6, Odoribacter splanchnicus|Bacteroides sp. 1_1_6, Olsenella ulii|Bacteroides sp. 1_1_6, Oribacterium sinus|Bacteroides sp. 1_1_6, Oxalobacter formigenes|Bacteroides sp. 1_1_6, Parabacteroides distasonis|Bacteroides sp. 1_1_6, Parabacteroides johnsonii|Bacteroides sp. 1_1_6, Parabacteroides merdae|Bacteroides sp. 1_1_6, Parvimonas micra|Bacteroides sp. 1_1_6, Pediococcus acidilactici|Bacteroides sp. 1_1_6, Pediococcus pentosaceus|Bacteroides sp. 1_1_6, Peptoniphilus duerdenii|Bacteroides sp. 1_1_6, Peptoniphilus harei|Bacteroides sp. 1_1_6, Peptoniphilus lacrimalis|Bacteroides sp. 1_1_6, Peptostreptococcus anaerobius|Bacteroides sp. 1_1_6, Peptostreptococcus stomatis|Bacteroides sp. 1_1_6, Porphyromonas asaccharolytica|Bacteroides sp. 1_1_6, Porphyromonas unonis|Bacteroides sp. 1_1_6, Prevotella amnii|Bacteroides sp. 1_1_6, Prevotella bergensis|Bacteroides sp. 1_1_6, Prevotella bivia|Bacteroides sp. 1_1_6, Prevotella buccae|Bacteroides sp. 1_1_6, Prevotella buccalis|Bacteroides sp. 1_1_6, Prevotella copri|Bacteroides sp. 1_1_6, Prevotella disiens|Bacteroides sp. 1_1_6, Prevotella melaninogenica|Bacteroides sp. 1_1_6, Prevotella multiformis|Bacteroides sp. 1_1_6, Prevotella oralis|Bacteroides sp. 1_1_6, Prevotella oris|Bacteroides sp. 1_1_6, Prevotella salivaria|Bacteroides sp. 1_1_6, Prevotella timonensis|Bacteroides sp. 1_1_6, Propionibacterium acnes|Bacteroides sp. 1_1_6, Propionibacterium freudenreichii|Bacteroides sp. 1_1_6, Proteus mirabilis|Bacteroides sp. 1_1_6, Proteus penneri|Bacteroides sp. 1_1_6, Pseudoflavonifractor capillosus|Bacteroides sp. 1_1_6, Pseudomonas aeruginosa|Bacteroides sp. 1_1_6, Pseudomonas fluorescens|Bacteroides sp. 1_1_6, Pseudomonas putida|Bacteroides sp. 1_1_6, Pseudorambacter alactolyticus|Bacteroides sp. 1_1_6, Pyramidobacter piscosolens|Bacteroides sp. 1_1_6, Rhodopseudomonas palustris|Bacteroides sp. 1_1_6, Roseburia intestinalis|Bacteroides sp. 1_1_6, Roseburia inulinivorans|Bacteroides sp. 1_1_6, Rothia dentocariosa|Bacteroides sp. 1_1_6, Rothia mucilaginosa|Bacteroides sp. 1_1_6, Ruminococcus albus|Bacteroides sp. 1_1_6, Ruminococcus bromii|Bacteroides sp. 1_1_6, Ruminococcus gnavus|Bacteroides sp. 1_1_6, Ruminococcus lactaris|Bacteroides sp. 1_1_6, Ruminococcus obeum|Bacteroides sp. 1_1_6, Ruminococcus torques|Bacteroides sp. 1_1_6, Selenomonas sputigena|Bacteroides sp. 1_1_6, Shigella boydii|Bacteroides sp. 1_1_6, Shigella dysenteriae|Bacteroides sp. 1_1_6, Shigella sonnei|Bacteroides sp. 1_1_6, Slackia exigua|Bacteroides sp. 1_1_6, Solobacterium moorei|Bacteroides sp. 1_1_6, Staphylococcus aureus|Bacteroides sp. 1_1_6, Staphylococcus epidermidis|Bacteroides sp. 1_1_6, Staphylococcus hominis|Bacteroides sp. 1_1_6, Staphylococcus saprophyticus|Bacteroides sp. 1_1_6, Staphylococcus warneri|Bacteroides sp. 1_1_6, Streptococcus agalactiae|Bacteroides sp. 1_1_6, Streptococcus anginosus|Bacteroides sp. 1_1_6, Streptococcus australis|Bacteroides sp. 1_1_6, Streptococcus bovis|Bacteroides sp. 1_1_6, Streptococcus cristatus|Bacteroides sp. 1_1_6, Streptococcus dysgalactiae|Bacteroides sp. 1_1_6, Streptococcus equinus|Bacteroides sp. 1_1_6, Streptococcus gordonii|Bacteroides sp. 1_1_6, Streptococcus infantarius|Bacteroides sp. 1_1_6, Streptococcus infantilis|Bacteroides sp. 1_1_6, Streptococcus mitis|Bacteroides sp. 1_1_6, Streptococcus mutans|Bacteroides sp. 1_1_6, Streptococcus oralis|Bacteroides sp. 1_1_6, Streptococcus parasanguinis|Bacteroides sp. 1_1_6, Streptococcus peroris|Bacteroides sp. 1_1_6, Streptococcus pneumoniae|Bacteroides sp. 1_1_6, Streptococcus salivarius|Bacteroides sp. 1_1_6, Streptococcus sanguinis|Bacteroides sp. 1_1_6, Streptococcus thermophilus|Bacteroides sp. 1_1_6, Streptococcus vestibularis|Bacteroides sp. 1_1_6, Subdoligranulum variabile|Bacteroides sp. 1_1_6, Succinatimonas hippei|Bacteroides sp. 1_1_6, Sutterella wadsworthensis|Bacteroides sp. 1_1_6, Tropheryma whippelii|Bacteroides sp. 1_1_6, Veillonella atypica|Bacteroides sp. 1_1_6, Veillonella dispar|Bacteroides sp.

1_1_6, Veillonella parvula/Bacteroides sp. 3_1_23, Victivallis vadensis/Bacteroides sp. 3_1_23, Bacteroides sp. 3_1_23/Bacteroides sp. 3_1_23, Bacteroides stercoris/Bacteroides sp. 3_1_23, Bacteroides thetaioetaomicron/Bacteroides sp. 3_1_23, Bacteroides uniformis/Bacteroides sp. 3_1_23, Bacteroides vulgatus/Bacteroides sp. 3_1_23, Bacteroides xylanisolvens/Bacteroides sp. 3_1_23, Bifidobacterium adolescentis/Bacteroides sp. 3_1_23, Bifidobacterium angulatum/Bacteroides sp. 3_1_23, Bifidobacterium animalis/Bacteroides sp. 3_1_23, Bifidobacterium bifidum/Bacteroides sp. 3_1_23, Bifidobacterium breve/Bacteroides sp. 3_1_23, Bifidobacterium catenulatum/Bacteroides sp. 3_1_23, Bifidobacterium dentium/Bacteroides sp. 3_1_23, Bifidobacterium infantis/Bacteroides sp. 3_1_23, Bifidobacterium longum/Bacteroides sp. 3_1_23, Bifidobacterium pseudocatenulatum/Bacteroides sp. 3_1_23, Bilophila wadsworthia/Bacteroides sp. 3_1_23, Blautia hansenii/Bacteroides sp. 3_1_23, Blautia hydrogenotrophica/Bacteroides sp. 3_1_23, Blautia producta/Bacteroides sp. 3_1_23, Blautia schinkii/Bacteroides sp. 3_1_23, Brevibacterium linens/Bacteroides sp. 3_1_23, Brucella ceti/Bacteroides sp. 3_1_23, Brucella suis/Bacteroides sp. 3_1_23, Bulleidia extructa/Bacteroides sp. 3_1_23, Butyrivibrio crossotus/Bacteroides sp. 3_1_23, Campylobacter concisus/Bacteroides sp. 3_1_23, Campylobacter curvus/Bacteroides sp. 3_1_23, Campylobacter gracilis/Bacteroides sp. 3_1_23, Campylobacter hominis/Bacteroides sp. 3_1_23, Capnocytophaga ochracea/Bacteroides sp. 3_1_23, Cardiobacterium hominis/Bacteroides sp. 3_1_23, Catenibacterium mitsuokai/Bacteroides sp. 3_1_23, Catonella morbi/Bacteroides sp. 3_1_23, Citrobacter koseri/Bacteroides sp. 3_1_23, Clostridium asparagiforme/Bacteroides sp. 3_1_23, Clostridium bartlettii/Bacteroides sp. 3_1_23, Clostridium boltea/Bacteroides sp. 3_1_23, Clostridium botulinum/Bacteroides sp. 3_1_23, Clostridium butyricum/Bacteroides sp. 3_1_23, Clostridium difficile/Bacteroides sp. 3_1_23, Clostridium disporicum/Bacteroides sp. 3_1_23, Clostridium hathewayi/Bacteroides sp. 3_1_23, Clostridium hylemonae/Bacteroides sp. 3_1_23, Clostridium innocuum/Bacteroides sp. 3_1_23, Clostridium leptum/Bacteroides sp. 3_1_23, Clostridium mayombei/Bacteroides sp. 3_1_23, Clostridium methylpentosum/Bacteroides sp. 3_1_23, Clostridium nexile/Bacteroides sp. 3_1_23, Clostridium orbiscindens/Bacteroides sp. 3_1_23, Clostridium perfringens/Bacteroides sp. 3_1_23, Clostridium saccharolyticum/Bacteroides sp. 3_1_23, Clostridium scindens/Bacteroides sp. 3_1_23, Clostridium symbiosum/Bacteroides sp. 3_1_23, Clostridium tertium/Bacteroides sp. 3_1_23, Collinsella aerofaciens/Bacteroides sp. 3_1_23, Collinsella intestinalis/Bacteroides sp. 3_1_23, Collinsella stercoris/Bacteroides sp. 3_1_23, Coprobacillus sp. D7/Bacteroides sp. 3_1_23, Coprococcus catus/Bacteroides sp. 3_1_23, Coprococcus comes/Bacteroides sp. 3_1_23, Coprococcus eutactus/Bacteroides sp. 3_1_23, Corynebacterium aurimucosum/Bacteroides sp. 3_1_23, Corynebacterium matruchotii/Bacteroides sp. 3_1_23, Cryptobacterium curtum/Bacteroides sp. 3_1_23, Desulfovibrio desulfuricans/Bacteroides sp. 3_1_23, Desulfovibrio piger/Bacteroides sp. 3_1_23, Dialister invisus/Bacteroides sp. 3_1_23, Dialister microaerophilus/Bacteroides sp. 3_1_23, Dorea formicigenerans/Bacteroides sp. 3_1_23, Dorea longicatena/Bacteroides sp. 3_1_23, Eggerthella lenta/Bacteroides sp. 3_1_23, Eikenella corrodens/Bacteroides sp. 3_1_23, Enterobacter cancerogenus/Bacteroides sp. 3_1_23, Enterobacter cloacae/Bacteroides sp. 3_1_23, Enterococcus faecalis/Bacteroides sp. 3_1_23, Enterococcus faecium/Bacteroides sp. 3_1_23, Enterococcus gallinarum/Bacteroides sp. 3_1_23, Erysipelotrichaceae bacterium 3_1_53/Bacteroides sp. 3_1_23, Escherichia coli/Bacteroides sp. 3_1_23, Escherichia fergusonii/Bacteroides sp. 3_1_23, Ethanoligenens harbinense/Bacteroides sp. 3_1_23, Eubacterium cellulosolvens/Bacteroides sp. 3_1_23, Eubacterium eligens/Bacteroides sp. 3_1_23, Eubacterium hallii/Bacteroides sp. 3_1_23, Eubacterium limosum/Bacteroides sp. 3_1_23, Eubacterium rectale/Bacteroides sp. 3_1_23, Eubacterium siraeum/Bacteroides sp. 3_1_23, Eubacterium ventriosum/Bacteroides sp. 3_1_23, Faecalibacterium prausnitzii/Bacteroides sp. 3_1_23, Finegoldia magna/Bacteroides sp. 3_1_23, Fusobacterium gonidiaformans/Bacteroides sp. 3_1_23, Fusobacterium mortiferum/Bacteroides sp. 3_1_23, Fusobacterium nucleatum/Bacteroides sp. 3_1_23, Fusobacterium varium/Bacteroides sp. 3_1_23, Gardnerella vaginalis/Bacteroides sp. 3_1_23, Gemella haemolysans/Bacteroides sp. 3_1_23, Gemella morbillorum/Bacteroides sp. 3_1_23, Gordoniabacter pamelaeae/Bacteroides sp. 3_1_23, Granulicatella adiacens/Bacteroides sp. 3_1_23, Granulicatella elegans/Bacteroides sp. 3_1_23, Haemophilus influenzae/Bacteroides sp. 3_1_23, Haemophilus parainfluenzae/Bacteroides sp. 3_1_23, Helicobacter pullorum/Bacteroides sp. 3_1_23, Helicobacter pylori/Bacteroides sp. 3_1_23, Holdemania filiformis/Bacteroides sp. 3_1_23, Kingella oralis/Bacteroides sp. 3_1_23, Klebsiella pneumoniae/Bacteroides sp. 3_1_23, Klebsiella varicola/Bacteroides sp. 3_1_23, Lachnospiraceae bacterium 5_1_57FAA/Bacteroides sp. 3_1_23, Lactobacillus acidophilus/Bacteroides sp. 3_1_23, Lactobacillus amylovorus/Bacteroides sp. 3_1_23, Lactobacillus brevis/Bacteroides sp. 3_1_23, Lactobacillus casei/Bacteroides sp. 3_1_23, Lactobacillus crispatus/Bacteroides sp. 3_1_23, Lactobacillus delbrueckii/Bacteroides sp. 3_1_23, Lactobacillus fermentum/Bacteroides sp. 3_1_23, Lactobacillus gasseri/Bacteroides sp. 3_1_23, Lactobacillus iners/Bacteroides sp. 3_1_23, Lactobacillus jensenii/Bacteroides sp. 3_1_23, Lactobacillus johnsonii/Bacteroides sp. 3_1_23, Lactobacillus paracasei/Bacteroides sp. 3_1_23, Lactobacillus plantarum/Bacteroides sp. 3_1_23, Lactobacillus reuteri/Bacteroides sp. 3_1_23, Lactobacillus rhamnosus/Bacteroides sp. 3_1_23, Lactobacillus ruminis/Bacteroides sp. 3_1_23, Lactobacillus sakei/Bacteroides sp. 3_1_23, Lactobacillus salivarius/Bacteroides sp. 3_1_23, Lactococcus lactis/Bacteroides sp. 3_1_23, Lautropia mirabilis/Bacteroides sp. 3_1_23, Leuconostoc citreum/Bacteroides sp. 3_1_23, Leuconostoc gasicomitatum/Bacteroides sp. 3_1_23, Leuconostoc mesenteroides/Bacteroides sp. 3_1_23, Listeria monocytogenes/Bacteroides sp. 3_1_23, Marvinbryantia formatexigens/Bacteroides sp. 3_1_23, Megamonas hypermegale/Bacteroides sp. 3_1_23, Megasphaera micronuciformis/Bacteroides sp. 3_1_23, Methanobrevibacter smithii/Bacteroides sp. 3_1_23, Methanospaera stadmanae/Bacteroides sp. 3_1_23, Methylobacterium radiotolerans/Bacteroides sp. 3_1_23, Mitsuokella multicauda/Bacteroides sp. 3_1_23, Mobiluncus curtisii/Bacteroides sp. 3_1_23, Mycoplasma hominis/Bacteroides sp. 3_1_23, Neisseria mucosa/Bacteroides sp. 3_1_23, Odoribacter splanchnicus/Bacteroides sp. 3_1_23, Olsenella uli/Bacteroides sp. 3_1_23, Oribacterium sinus/Bacteroides sp. 3_1_23, Oxalobacter formigenes/Bacteroides sp. 3_1_23, Parabacteroides distasonis/Bacteroides sp. 3_1_23, Parabacteroides johnsonii/Bacteroides sp. 3_1_23, Paracaseibacter merdae/Bacteroides sp. 3_1_23, Parvimonas microaerophilus/Bacteroides sp. 3_1_23, Pediococcus acidilactici/Bacteroides sp. 3_1_23, Peptococcus pentosaceus/Bacteroides sp. 3_1_23, Peptoniphilus duerdenii/Bacteroides sp. 3_1_23, Peptoniphilus harei/Bacteroides sp. 3_1_23, Peptoniphilus lacrimalis/Bacteroides sp. 3_1_23, Peptostreptococcus anaerobius/Bacteroides sp. 3_1_23, Peptostreptococcus stomatis/Bacteroides sp. 3_1_23, Porphyromonas asaccharolytica/Bacteroides sp. 3_1_23, Porphyromonas unenonis/Bacteroides sp. 3_1_23, Prevotella amnii/Bacteroides sp. 3_1_23, Prevotella bergensis/Bacteroides sp. 3_1_23, Prevotella bivia/Bacteroides sp. 3_1_23, Prevotella buccae/Bacteroides sp. 3_1_23, Prevotella buccalis/Bacteroides sp. 3_1_23, Prevotella copri/Bacteroides sp. 3_1_23, Prevotella disiens/Bacteroides sp. 3_1_23, Prevotella melaninogenica/Bacteroides sp. 3_1_23, Prevotella multififormis/Bacteroides sp. 3_1_23, Prevotella oralis/Bacteroides sp. 3_1_23, Prevotella oris/Bacteroides sp. 3_1_23, Prevotella salivae/Bacteroides sp. 3_1_23, Prevotella timonensis/Bacteroides sp. 3_1_23, Propionibacterium acnes/Bacteroides sp. 3_1_23, Propionibacterium freudenreichii/Bacteroides sp. 3_1_23, Proteus mirabilis/Bacteroides sp. 3_1_23, Proteus penneri/Bacteroides sp. 3_1_23, Pseudoflavonifractor capillosus/Bacteroides sp. 3_1_23, Pseudomonas aeruginosa/Bacteroides sp. 3_1_23, Pseudomonas fluorescens/Bacteroides sp. 3_1_23, Pseudomonas putida/Bacteroides sp. 3_1_23, Pseudoramibacter alactolyticus/Bacteroides sp. 3_1_23, Pyramidobacter pisciculus/Bacteroides sp. 3_1_23, Rhodospseudomonas palustris/Bacteroides sp. 3_1_23, Roseburia intestinalis/Bacteroides sp. 3_1_23, Roseburia inulinivorans/Bacteroides sp. 3_1_23, Rothia dentocariosa/Bacteroides sp. 3_1_23, Rothia mucilaginosa/Bacteroides sp. 3_1_23, Ruminococcus albus/Bacteroides sp. 3_1_23, Ruminococcus bromii/Bacteroides sp. 3_1_23, Ruminococcus gnavus/Bacteroides sp. 3_1_23, Ruminococcus lactaris/Bacteroides sp. 3_1_23, Ruminococcus obeum/Bacteroides sp. 3_1_23, Ruminococcus torques/Bacteroides sp. 3_1_23, Selenomonas spungitena/Bacteroides sp. 3_1_23, Shigella boydii/Bacteroides sp. 3_1_23, Shigella dysenteriae/Bacteroides sp. 3_1_23, Shigella sonnei/Bacteroides sp. 3_1_23, Slackia exigua/Bacteroides sp. 3_1_23, Solobacterium moorei/Bacteroides sp. 3_1_23, Staphylococcus aureus/Bacteroides sp. 3_1_23, Staphylococcus epidermidis/Bacteroides sp. 3_1_23, Staphylococcus hominis/Bacteroides sp. 3_1_23, Staphylococcus saprophyticus/Bacteroides sp. 3_1_23, Staphylococcus warneri/Bacteroides sp. 3_1_23, Streptococcus agalactiae/Bacteroides sp. 3_1_23, Streptococcus anginosus/Bacteroides sp. 3_1_23, Streptococcus australis/Bacteroides sp. 3_1_23, Streptococcus bovis/Bacteroides sp. 3_1_23, Streptococcus cristatus/Bacteroides sp. 3_1_23, Streptococcus dysgalactiae/Bacteroides sp. 3_1_23, Streptococcus equinus/Bacteroides sp. 3_1_23, Streptococcus gordonii/Bacteroides sp. 3_1_23, Streptococcus infantarius/Bacteroides sp. 3_1_23, Streptococcus infantilis/Bacteroides sp. 3_1_23, Streptococcus mutans/Bacteroides sp. 3_1_23, Streptococcus oralis/Bacteroides sp. 3_1_23, Streptococcus parasanguis/Bacteroides sp. 3_1_23, Streptococcus peroris/Bacteroides sp. 3_1_23, Streptococcus pneumoniae/Bacteroides sp. 3_1_23, Streptococcus salivarius/Bacteroides sp. 3_1_23, Streptococcus sanguinis/Bacteroides sp. 3_1_23, Streptococcus thermophilus/Bacteroides sp. 3_1_23, Streptococcus vestibularis/Bacteroides sp. 3_1_23, Subdoligranulum variabile/Bacteroides sp. 3_1_23, Succinatimonas hippie/Bacteroides sp. 3_1_23, Sutterella wadsworthensis/Bacteroides sp. 3_1_23, Tropheryma whippelii/Bacteroides sp. 3_1_23, Veillonella atypica/Bacteroides sp. 3_1_23, Veillonella dispar/Bacteroides sp. 3_1_23, Veillonella parvula/Bacteroides sp. 3_1_23, Victivallis vadensis/Bacteroides sp. 3_1_23, Bacteroides stercoris/Bacteroides stercoris, Bacteroides thetaioetaomicron/Bacteroides stercoris, Bacteroides uniformis/Bacteroides stercoris, Bacteroides vulgatus/Bacteroides stercoris, Bacteroides xylanisolvens/Bacteroides stercoris, Bifidobacterium adolescentis/Bacteroides stercoris, Bifidobacterium angulatum/Bacteroides stercoris, Bifidobacterium animalis/Bacteroides stercoris, Bifidobacterium bifidum/Bacteroides stercoris, Bifidobacterium breve/Bacteroides stercoris, Bifidobacterium catenulatum/Bacteroides stercoris, Bifidobacterium dentium/Bacteroides stercoris, Bifidobacterium infantis/Bacteroides stercoris, Bifidobacterium longum/Bacteroides stercoris, Bifidobacterium pseudocatenulatum/Bacteroides stercoris, Bilophila wadsworthia/Bacteroides stercoris, Blautia hansenii/Bacteroides stercoris, Blautia hydrogenotrophica/Bacteroides stercoris, Blautia producta/Bacteroides stercoris, Blautia schinkii/Bacteroides stercoris, Brevibacterium linens/Bacteroides stercoris, Brucella ceti/Bacteroides stercoris, Bulleidia extructa/Bacteroides stercoris, Butyrivibrio crossotus/Bacteroides stercoris, Campylobacter concisus/Bacteroides stercoris, Campylobacter curvus/Bacteroides stercoris, Campylobacter gracilis/Bacteroides stercoris, Campylobacter hominis/Bacteroides stercoris, Capnocytophaga ochracea/Bacteroides stercoris, Cardiobacterium hominis/Bacteroides stercoris, Catenibacterium mitsuokai/Bacteroides stercoris, Catonella morbi/Bacteroides stercoris, Citrobacter koseri/Bacteroides stercoris, Clostridium asparagiforme/Bacteroides stercoris, Clostridium bartlettii/Bacteroides stercoris, Clostridium boltea/Bacteroides stercoris, Clostridium botulinum/Bacteroides stercoris, Clostridium butyricum/Bacteroides stercoris, Clostridium difficile/Bacteroides stercoris, Clostridium disporicum/Bacteroides stercoris, Clostridium hathewayi/Bacteroides stercoris, Clostridium hylemonae/Bacteroides stercoris, Clostridium innocuum/Bacteroides stercoris, Clostridium leptum/Bacteroides stercoris, Clostridium mayombei/Bacteroides stercoris, Clostridium methylpentosum/Bacteroides stercoris, Clostridium nexile/Bacteroides stercoris, Clostridium orbiscindens/Bacteroides stercoris, Clostridium perfringens/Bacteroides stercoris, Clostridium saccharolyticum/Bacteroides stercoris, Clostridium scindens/Bacteroides stercoris, Clostridium symbiosum/Bacteroides stercoris, Clostridium tertium/Bacteroides stercoris, Collinsella aerofaciens/Bacteroides stercoris, Collinsella intestinalis/Bacteroides stercoris, Collinsella stercoris/Bacteroides stercoris, Coprobacillus sp. D7/Bacteroides stercoris, Coprococcus catus/Bacteroides stercoris, Coprococcus comes/Bacteroides stercoris, Coprococcus eutactus/Bacteroides stercoris, Corynebacterium aurimucosum/Bacteroides stercoris, Corynebacterium matruchotii/Bacteroides stercoris, Cryptobacterium curtum/Bacteroides stercoris, Desulfovibrio desulfuricans/Bacteroides stercoris, Desulfovibrio piger/Bacteroides stercoris, Dialister invisus/Bacteroides stercoris, Dialister microaerophilus/Bacteroides stercoris, Dorea formicigenerans/Bacteroides stercoris, Dorea longicatena/Bacteroides stercoris, Eggerthella lenta/Bacteroides stercoris, Eikenella corrodens/Bacteroides stercoris, Enterobacter cancerogenus/Bacteroides stercoris, Enterobacter cloacae/Bacteroides stercoris, Enterococcus faecalis/Bacteroides stercoris, Enterococcus faecium/Bacteroides stercoris, Enterococcus gallinarum/Bacteroides stercoris, Erysipelotrichaceae bacterium 3_1_53/Bacteroides stercoris, Escherichia coli/Bacteroides stercoris, Escherichia fergusonii/Bacteroides stercoris, Ethanoligenens harbinense/Bacteroides stercoris, Eubacterium cellulosolvens/Bacteroides stercoris, Eubacterium eligens/Bacteroides stercoris, Eubacterium hallii/Bacteroides stercoris, Eubacterium limosum/Bacteroides stercoris, Eubacterium rectale/Bacteroides stercoris, Eubacterium siraeum/Bacteroides stercoris, Eubacterium ventriosum/Bacteroides stercoris, Faecalibacterium prausnitzii/Bacteroides stercoris, Finegoldia magna/Bacteroides stercoris, Fusobacterium gonidiaformans/Bacteroides stercoris, Fusobacterium mortiferum/Bacteroides stercoris, Fusobacterium nucleatum/Bacteroides stercoris, Fusobacterium varium/Bacteroides stercoris, Gardnerella vaginalis/Bacteroides stercoris, Gemella haemolysans/Bacteroides stercoris, Gemella morbillorum/Bacteroides stercoris, Gordoniabacter pamelaeae/Bacteroides stercoris, Granulicatella adiacens/Bacteroides stercoris, Granulicatella elegans/Bacteroides stercoris, Haemophilus influenzae/Bacteroides stercoris, Haemophilus parainfluenzae/Bacteroides stercoris, Helicobacter pullorum/Bacteroides stercoris, Helicobacter pylori/Bacteroides stercoris, Holdemania filiformis/Bacteroides stercoris, Kingella oralis/Bacteroides stercoris, Klebsiella pneumoniae/Bacteroides stercoris, Klebsiella varicola/Bacteroides stercoris, Lachnospiraceae bacterium 5_1_57FAA/Bacteroides stercoris, Lactobacillus acidophilus/Bacteroides stercoris, Lactobacillus amylovorus/Bacteroides stercoris, Lactobacillus casei/Bacteroides stercoris, Lactobacillus crispatus/Bacteroides stercoris, Lactobacillus delbrueckii/Bacteroides stercoris, Lactobacillus fermentum/Bacteroides stercoris, Lactobacillus gasseri/Bacteroides stercoris, Lactobacillus iners/Bacteroides stercoris, Lactobacillus jensenii/Bacteroides stercoris, Lactobacillus johnsonii/Bacteroides stercoris, Lactobacillus paracasei/Bacteroides stercoris, Lactobacillus plantarum/Bacteroides stercoris, Lactobacillus reuteri/Bacteroides stercoris, Lactobacillus rhamnosus/Bacteroides stercoris, Lactobacillus ruminis/Bacteroides stercoris, Lactobacillus sakei/Bacteroides stercoris, Lactobacillus salivarius/Bacteroides stercoris, Lactococcus lactis/Bacteroides stercoris, Lautropia mirabilis/Bacteroides stercoris, Leuconostoc citreum/Bacteroides stercoris, Leuconostoc gasicomitatum/Bacteroides stercoris, Leuconostoc mesenteroides/Bacteroides stercoris, Listeria monocytogenes/Bacteroides stercoris, Marvinbryantia formatexigens/Bacteroides stercoris, Megamonas hypermegale/Bacteroides stercoris, Megasphaera micronuciformis/Bacteroides stercoris, Methanobrevibacter smithii/Bacteroides stercoris, Methanospaera stadmanae/Bacteroides stercoris, Methylobacterium radiotolerans/Bacteroides stercoris, Mitsuokella multicauda/Bacteroides stercoris, Mobiluncus curtisii/Bacteroides stercoris, Mycoplasma hominis/Bacteroides stercoris, Neisseria mucosa/Bacteroides stercoris, Odoribacter splanchnicus/Bacteroides stercoris, Olsenella uli/Bacteroides stercoris, Oribacterium sinus/Bacteroides stercoris, Oxalobacter formigenes/Bacteroides stercoris, Parabacteroides distasonis/Bacteroides stercoris, Parabacteroides johnsonii/Bacteroides stercoris, Paracaseibacter merdae/Bacteroides stercoris, Parvimonas microaerophilus/Bacteroides stercoris, Pediococcus acidilactici/Bacteroides stercoris, Pediococcus pentosaceus/Bacteroides stercoris, Peptoniphilus duerdenii/Bacteroides stercoris, Peptoniphilus harei/Bacteroides stercoris, Peptoniphilus lacrimalis/Bacteroides stercoris, Peptostreptococcus anaerobius/Bacteroides stercoris, Peptostreptococcus stomatis/Bacteroides stercoris, Porphyromonas asaccharolytica/Bacteroides stercoris, Porphyromonas unenonis/Bacteroides stercoris, Prevotella amnii/Bacteroides stercoris, Prevotella bergensis/Bacteroides stercoris, Prevotella bivia/Bacteroides stercoris, Prevotella buccae/Bacteroides stercoris, Prevotella buccalis/Bacteroides stercoris, Prevotella copri/Bacteroides stercoris, Prevotella disiens/Bacteroides stercoris, Prevotella melaninogenica/Bacteroides stercoris, Prevotella multififormis/Bacteroides stercoris, Prevotella oralis/Bacteroides stercoris, Prevotella oris/Bacteroides stercoris, Prevotella salivae/Bacteroides stercoris, Prevotella timonensis/Bacteroides stercoris, Propionibacterium acnes/Bacteroides stercoris, Propionibacterium freudenreichii/Bacteroides stercoris, Proteus mirabilis/Bacteroides stercoris, Proteus penneri/Bacteroides stercoris, Pseudoflavonifractor capillosus/Bacteroides stercoris, Pseudomonas aeruginosa/Bacteroides stercoris, Pyramidobacter pisciculus/Bacteroides stercoris, Rhodospseudomonas palustris/Bacteroides stercoris, Roseburia intestinalis/Bacteroides stercoris, Roseburia inulinivorans/Bacteroides stercoris, Rothia dentocariosa/Bacteroides stercoris, Rothia mucilaginosa/Bacteroides stercoris, Ruminococcus albus/Bacteroides

123

124

125

126

animalis, Porphyromonas asaccharolytica|Bifidobacterium animalis, Porphyromonas uenonis|Bifidobacterium animalis, Prevotella annii|Bifidobacterium animalis, Prevotella bergensis|Bifidobacterium animalis, Prevotella bivia|Bifidobacterium animalis, Prevotella buccae|Bifidobacterium animalis, Prevotella buccalis|Bifidobacterium animalis, Prevotella copri|Bifidobacterium animalis, Prevotella disiens|Bifidobacterium animalis, Prevotella melaninogenica|Bifidobacterium animalis, Prevotella multiformis|Bifidobacterium animalis, Prevotella oralis|Bifidobacterium animalis, Prevotella oris|Bifidobacterium animalis, Prevotella salivae|Bifidobacterium animalis, Prevotella timonensis|Bifidobacterium animalis, Propionibacterium animalis, Propionibacterium freudenreichii|Bifidobacterium animalis, Proteus mirabilis|Bifidobacterium animalis, Proteus penneri|Bifidobacterium animalis, Pseudoflavonifractor capillosus|Bifidobacterium animalis, Pseudomonas aeruginosa|Bifidobacterium animalis, Pseudomonas fluorescens|Bifidobacterium animalis, Pseudomonas putida|Bifidobacterium animalis, Pseudoramibacter alactolyticus|Bifidobacterium animalis, Pyramidobacter piscicola|Bifidobacterium animalis, Rhodopseudomonas palustris|Bifidobacterium animalis, Roseburia intestinalis|Bifidobacterium animalis, Roseburia inulinivorans|Bifidobacterium animalis, Rothia dentocariosa|Bifidobacterium animalis, Rothia mucilaginosa|Bifidobacterium animalis, Ruminococcus albus|Bifidobacterium animalis, Ruminococcus bromii|Bifidobacterium animalis, Ruminococcus gnavus|Bifidobacterium animalis, Ruminococcus lactaris|Bifidobacterium animalis, Ruminococcus obeum|Bifidobacterium animalis, Ruminococcus torques|Bifidobacterium animalis, Selenomonas sputigena|Bifidobacterium animalis, Shigella boydii|Bifidobacterium animalis, Shigella dysenteriae|Bifidobacterium animalis, Shigella sonnei|Bifidobacterium animalis, Shigella exigua|Bifidobacterium animalis, Solobacterium moorei|Bifidobacterium animalis, Staphylococcus aureus|Bifidobacterium animalis, Staphylococcus epidermidis|Bifidobacterium animalis, Staphylococcus hominis|Bifidobacterium animalis, Staphylococcus saprophyticus|Bifidobacterium animalis, Staphylococcus warneri|Bifidobacterium animalis, Streptococcus agalactiae|Bifidobacterium animalis, Streptococcus anginosus|Bifidobacterium animalis, Streptococcus australis|Bifidobacterium animalis, Streptococcus bovis|Bifidobacterium animalis, Streptococcus cristatus|Bifidobacterium animalis, Streptococcus dysgalactiae|Bifidobacterium animalis, Streptococcus equinus|Bifidobacterium animalis, Streptococcus gordonii|Bifidobacterium animalis, Streptococcus infantarius|Bifidobacterium animalis, Streptococcus infantis|Bifidobacterium animalis, Streptococcus mitis|Bifidobacterium animalis, Streptococcus mutans|Bifidobacterium animalis, Streptococcus oralis|Bifidobacterium animalis, Streptococcus peroris|Bifidobacterium animalis, Streptococcus pneumoniae|Bifidobacterium animalis, Streptococcus salivarius|Bifidobacterium animalis, Streptococcus sanguinis|Bifidobacterium animalis, Streptococcus thermophilus|Bifidobacterium animalis, Streptococcus vestibularis|Bifidobacterium animalis, Subdoligranulum variable|Bifidobacterium animalis, Succinatimonas hippei|Bifidobacterium animalis, Sutterella wadsworthensis|Bifidobacterium animalis, Tropheryma whippelii|Bifidobacterium animalis, Veillonella atypica|Bifidobacterium animalis, Veillonella dispar|Bifidobacterium animalis, Veillonella parvula|Bifidobacterium animalis, Victivallis vadensis|Bifidobacterium animalis, Bifidobacterium breve|Bifidobacterium bifidum, Bifidobacterium catenulatum|Bifidobacterium bifidum, Bifidobacterium dentium|Bifidobacterium bifidum, Bifidobacterium infantis|Bifidobacterium bifidum, Bifidobacterium longum|Bifidobacterium bifidum, Bifidobacterium pseudocatenulatum|Bifidobacterium bifidum, Bilophila wadsworthia|Bifidobacterium bifidum, Blautia hydrogenotrophica|Bifidobacterium bifidum, Blautia producta|Bifidobacterium bifidum, Blautia schinkii|Bifidobacterium bifidum, Brevibacterium linens|Bifidobacterium bifidum, Brucella ceti|Bifidobacterium bifidum, Brucella suis|Bifidobacterium bifidum, Bulleidia extructa|Bifidobacterium bifidum, Butyrivibrio crossotus|Bifidobacterium bifidum, Campylobacter concisus|Bifidobacterium bifidum, Campylobacter curvus|Bifidobacterium bifidum, Campylobacter gracilis|Bifidobacterium bifidum, Campylobacter hominis|Bifidobacterium bifidum, Capnocytophaga ochracea|Bifidobacterium bifidum, Cardiobacterium hominis|Bifidobacterium bifidum, Catenibacterium mitsuokai|Bifidobacterium bifidum, Catonella morbi|Bifidobacterium bifidum, Citrobacter koseri|Bifidobacterium bifidum, Clostridium asparagiforme|Bifidobacterium bifidum, Clostridium bartlettii|Bifidobacterium bifidum, Clostridium boltae|Bifidobacterium bifidum, Clostridium botulinum|Bifidobacterium bifidum, Clostridium butyricum|Bifidobacterium bifidum, Clostridium difficile|Bifidobacterium bifidum, Clostridium disporicum|Bifidobacterium bifidum, Clostridium hathewayi|Bifidobacterium bifidum, Clostridium hylemonae|Bifidobacterium bifidum, Clostridium innocuum|Bifidobacterium bifidum, Clostridium leptum|Bifidobacterium bifidum, Clostridium mayombeii|Bifidobacterium bifidum, Clostridium methylophilum|Bifidobacterium bifidum, Clostridium nexile|Bifidobacterium bifidum, Clostridium orbicindens|Bifidobacterium bifidum, Clostridium perfringens|Bifidobacterium bifidum, Clostridium saccharolyticum|Bifidobacterium bifidum, Clostridium scindens|Bifidobacterium bifidum, Clostridium symbiosum|Bifidobacterium bifidum, Clostridium tertium|Bifidobacterium bifidum, Collinsella aerofaciens|Bifidobacterium bifidum, Collinsella intestinalis|Bifidobacterium bifidum, Collinsella stercoris|Bifidobacterium bifidum, Coprobacillus sp. D7|Bifidobacterium bifidum, Coprococcus catus|Bifidobacterium bifidum, Coprococcus comes|Bifidobacterium bifidum, Coprococcus eutactus|Bifidobacterium bifidum, Corynebacterium aurimucosum|Bifidobacterium bifidum, Corynebacterium matruchotii|Bifidobacterium bifidum, Cryptobacterium curtum|Bifidobacterium bifidum, Desulfovibrio desulfuricans|Bifidobacterium bifidum, Desulfovibrio piger|Bifidobacterium bifidum, Dialister invisus|Bifidobacterium bifidum, Dialister microaerophilus|Bifidobacterium bifidum, Dorea formicigenerans|Bifidobacterium bifidum, Dorea longicatena|Bifidobacterium bifidum, Eggerthella lenta|Bifidobacterium bifidum, Eikenella corrodens|Bifidobacterium bifidum, Enterobacter cancerogenus|Bifidobacterium bifidum, Enterobacter cloacae|Bifidobacterium bifidum, Enterococcus faecalis|Bifidobacterium bifidum, Enterococcus faecium|Bifidobacterium bifidum, Enterococcus gallinarum|Bifidobacterium bifidum, Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium bifidum, Escherichia coli|Bifidobacterium bifidum, Escherichia fergusonii|Bifidobacterium bifidum, Ethanoligenens harbinense|Bifidobacterium bifidum, Eubacterium cellulosolvens|Bifidobacterium bifidum, Eubacterium eligens|Bifidobacterium bifidum, Eubacterium hallii|Bifidobacterium bifidum, Eubacterium limosum|Bifidobacterium bifidum, Eubacterium rectale|Bifidobacterium bifidum, Eubacterium siraeum|Bifidobacterium bifidum, Eubacterium ventriosum|Bifidobacterium bifidum, Faecalibacterium prausnitzii|Bifidobacterium bifidum, Finegoldia magna|Bifidobacterium bifidum, Fusobacterium gonidiaformans|Bifidobacterium bifidum, Fusobacterium mortiferum|Bifidobacterium bifidum, Fusobacterium nucleatum|Bifidobacterium bifidum, Fusobacterium varium|Bifidobacterium bifidum, Gardnerella vaginalis|Bifidobacterium bifidum, Gemella haemolysans|Bifidobacterium bifidum, Gemella morbillorum|Bifidobacterium bifidum, Gordonibacter pamelaiae|Bifidobacterium bifidum, Granulicatella adiacens|Bifidobacterium bifidum, Granulicatella elegans|Bifidobacterium bifidum, Haemophilus influenzae|Bifidobacterium bifidum, Haemophilus parainfluenzae|Bifidobacterium bifidum, Helicobacter pullorum|Bifidobacterium bifidum, Helicobacter pylori|Bifidobacterium bifidum, Holdemania filiformis|Bifidobacterium bifidum, Kingella oralis|Bifidobacterium bifidum, Klebsiella pneumoniae|Bifidobacterium bifidum, Klebsiella varicola|Bifidobacterium bifidum, Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium bifidum, Lactobacillus acidophilus|Bifidobacterium bifidum, Lactobacillus amylovorus|Bifidobacterium bifidum, Lactobacillus brevis|Bifidobacterium bifidum, Lactobacillus casei|Bifidobacterium bifidum, Lactobacillus crispatus|Bifidobacterium bifidum, Lactobacillus delbrueckii|Bifidobacterium bifidum, Lactobacillus fermentum|Bifidobacterium bifidum, Lactobacillus gasseri|Bifidobacterium bifidum, Lactobacillus iners|Bifidobacterium bifidum, Lactobacillus jensenii|Bifidobacterium bifidum, Lactobacillus johnsonii|Bifidobacterium bifidum, Lactobacillus paracasei|Bifidobacterium bifidum, Lactobacillus plantarum|Bifidobacterium bifidum, Lactobacillus reuteri|Bifidobacterium bifidum, Lactobacillus rhamnosus|Bifidobacterium bifidum, Lactobacillus ruminis|Bifidobacterium bifidum, Lactobacillus sakei|Bifidobacterium bifidum, Lactobacillus salivarius|Bifidobacterium bifidum, Lactococcus lactis|Bifidobacterium bifidum, Lautropia mirabilis|Bifidobacterium bifidum, Leuconostoc citreum|Bifidobacterium bifidum, Leuconostoc gasicomitatum|Bifidobacterium bifidum, Leuconostoc mesenteroides|Bifidobacterium bifidum, Listeria monocytogenes|Bifidobacterium bifidum, Marvinbryantia formatexigens|Bifidobacterium bifidum, Megamonas hypernegale|Bifidobacterium bifidum, Megasphaera microciformis|Bifidobacterium bifidum, Methanobrevibacter smithii|Bifidobacterium bifidum, Methanosphera stadtmannae|Bifidobacterium bifidum, Methylobacterium radiotolerans|Bifidobacterium bifidum, Mitsuokella multacida|Bifidobacterium bifidum, Mobiluncus curtisii|Bifidobacterium bifidum, Mycoplasma hominis|Bifidobacterium bifidum, Neisseria mucosa|Bifidobacterium bifidum, Odoribacter splanchnicus|Bifidobacterium bifidum, Olsenella uli|Bifidobacterium bifidum, Orbacterium sinus|Bifidobacterium bifidum, Oxalobacter formigenes|Bifidobacterium bifidum, Parabacteroides distans|Bifidobacterium bifidum, Parabacteroides johnsonii|Bifidobacterium bifidum, Parabacteroides merdae|Bifidobacterium bifidum, Parvimonas micra|Bifidobacterium bifidum, Pediococcus acidilactici|Bifidobacterium bifidum, Pediococcus pentosaceus|Bifidobacterium bifidum, Peptoniphilus duerdenii|Bifidobacterium bifidum, Peptoniphilus harei|Bifidobacterium bifidum, Peptoniphilus lacrimalis|Bifidobacterium bifidum, Pestostreptococcus anaerobius|Bifidobacterium bifidum, Pestostreptococcus stomatis|Bifidobacterium bifidum, Porphyromonas asaccharolytica|Bifidobacterium bifidum, Porphyromonas uenonis|Bifidobacterium bifidum, Prevotella annii|Bifidobacterium bifidum, Prevotella bergensis|Bifidobacterium bifidum, Prevotella bivia|Bifidobacterium bifidum, Prevotella buccae|Bifidobacterium bifidum, Prevotella buccalis|Bifidobacterium bifidum, Prevotella copri|Bifidobacterium bifidum, Prevotella disiens|Bifidobacterium bifidum, Prevotella melaninogenica|Bifidobacterium bifidum, Prevotella multiformis|Bifidobacterium bifidum, Prevotella oralis|Bifidobacterium bifidum, Prevotella oris|Bifidobacterium bifidum, Prevotella salivae|Bifidobacterium bifidum, Prevotella timonensis|Bifidobacterium bifidum, Propionibacterium animalis, Propionibacterium acnes|Bifidobacterium animalis, Propionibacterium freudenreichii|Bifidobacterium bifidum, Proteus mirabilis|Bifidobacterium bifidum, Proteus penneri|Bifidobacterium bifidum, Pseudoflavonifractor capillosus|Bifidobacterium bifidum, Pseudomonas aeruginosa|Bifidobacterium bifidum, Pseudomonas fluorescens|Bifidobacterium bifidum, Pseudomonas putida|Bifidobacterium bifidum, Pseudoramibacter alactolyticus|Bifidobacterium bifidum, Pyramidobacter piscicola|Bifidobacterium bifidum, Rhodopseudomonas palustris|Bifidobacterium bifidum, Roseburia intestinalis|Bifidobacterium bifidum, Roseburia inulinivorans|Bifidobacterium bifidum, Rothia dentocariosa|Bifidobacterium bifidum, Rothia mucilaginosa|Bifidobacterium bifidum, Ruminococcus albus|Bifidobacterium bifidum, Ruminococcus bromii|Bifidobacterium bifidum, Ruminococcus gnavus|Bifidobacterium bifidum, Ruminococcus lactaris|Bifidobacterium bifidum, Ruminococcus obeum|Bifidobacterium bifidum, Ruminococcus torques|Bifidobacterium bifidum, Selenomonas sputigena|Bifidobacterium bifidum, Shigella boydii|Bifidobacterium bifidum, Shigella dysenteriae|Bifidobacterium bifidum, Shigella sonnei|Bifidobacterium bifidum, Shigella exigua|Bifidobacterium bifidum, Solobacterium moorei|Bifidobacterium bifidum, Staphylococcus aureus|Bifidobacterium bifidum, Staphylococcus epidermidis|Bifidobacterium bifidum, Staphylococcus hominis|Bifidobacterium bifidum, Staphylococcus saprophyticus|Bifidobacterium bifidum, Staphylococcus warneri|Bifidobacterium bifidum, Streptococcus agalactiae|Bifidobacterium bifidum, Streptococcus anginosus|Bifidobacterium bifidum, Streptococcus australis|Bifidobacterium bifidum, Streptococcus bovis|Bifidobacterium bifidum, Streptococcus cristatus|Bifidobacterium bifidum, Streptococcus dysgalactiae|Bifidobacterium bifidum, Streptococcus equinus|Bifidobacterium bifidum, Streptococcus gordonii|Bifidobacterium bifidum, Streptococcus infantarius|Bifidobacterium bifidum, Streptococcus infantis|Bifidobacterium bifidum, Streptococcus mitis|Bifidobacterium bifidum, Streptococcus mutans|Bifidobacterium bifidum, Streptococcus oralis|Bifidobacterium bifidum, Streptococcus peroris|Bifidobacterium bifidum, Streptococcus pneumoniae|Bifidobacterium bifidum, Streptococcus salivarius|Bifidobacterium bifidum, Streptococcus sanguinis|Bifidobacterium bifidum, Streptococcus thermophilus|Bifidobacterium bifidum, Streptococcus vestibularis|Bifidobacterium bifidum, Subdoligranulum variable|Bifidobacterium bifidum, Succinatimonas hippei|Bifidobacterium bifidum, Sutterella wadsworthensis|Bifidobacterium bifidum, Tropheryma whippelii|Bifidobacterium bifidum, Veillonella atypica|Bifidobacterium bifidum, Veillonella dispar|Bifidobacterium bifidum, Veillonella parvula|Bifidobacterium bifidum, Victivallis vadensis|Bifidobacterium breve, Bifidobacterium catenulatum|Bifidobacterium breve, Bifidobacterium dentium|Bifidobacterium breve, Bifidobacterium infantis|Bifidobacterium breve, Bifidobacterium longum|Bifidobacterium breve, Bifidobacterium pseudocatenulatum|Bifidobacterium breve, Bilophila wadsworthia|Bifidobacterium breve, Blautia hanseni|Bifidobacterium breve, Blautia hydrogenotrophica|Bifidobacterium breve, Blautia producta|Bifidobacterium breve, Blautia schinkii|Bifidobacterium breve, Brevibacterium linens|Bifidobacterium breve, Brucella ceti|Bifidobacterium breve, Brucella suis|Bifidobacterium breve, Bulleidia extructa|Bifidobacterium breve, Butyrivibrio crossotus|Bifidobacterium breve, Campylobacter concisus|Bifidobacterium breve, Campylobacter curvus|Bifidobacterium breve, Campylobacter gracilis|Bifidobacterium breve, Campylobacter hominis|Bifidobacterium breve, Capnocytophaga ochracea|Bifidobacterium breve, Cardiobacterium hominis|Bifidobacterium breve, Catenibacterium mitsuokai|Bifidobacterium breve, Catonella morbi|Bifidobacterium breve, Citrobacter koseri|Bifidobacterium breve, Clostridium asparagiforme|Bifidobacterium breve, Clostridium bartlettii|Bifidobacterium breve, Clostridium boltae|Bifidobacterium breve, Clostridium botulinum|Bifidobacterium breve, Clostridium butyricum|Bifidobacterium breve, Clostridium difficile|Bifidobacterium breve, Clostridium disporicum|Bifidobacterium breve, Clostridium hathewayi|Bifidobacterium breve, Clostridium hylemonae|Bifidobacterium breve, Clostridium innocuum|Bifidobacterium breve, Clostridium leptum|Bifidobacterium breve, Clostridium mayombeii|Bifidobacterium breve, Clostridium methylophilum|Bifidobacterium breve, Clostridium nexile|Bifidobacterium breve, Clostridium orbicindens|Bifidobacterium breve, Clostridium perfringens|Bifidobacterium breve, Clostridium saccharolyticum|Bifidobacterium breve, Clostridium scindens|Bifidobacterium breve, Clostridium symbiosum|Bifidobacterium breve, Clostridium tertium|Bifidobacterium breve, Collinsella aerofaciens|Bifidobacterium breve, Collinsella intestinalis|Bifidobacterium breve, Collinsella stercoris|Bifidobacterium breve, Coprobacillus sp. D7|Bifidobacterium breve, Coprococcus catus|Bifidobacterium breve, Coprococcus comes|Bifidobacterium breve, Coprococcus eutactus|Bifidobacterium breve, Corynebacterium aurimucosum|Bifidobacterium breve, Corynebacterium matruchotii|Bifidobacterium breve, Cryptobacterium curtum|Bifidobacterium breve, Desulfovibrio desulfuricans|Bifidobacterium breve, Desulfovibrio piger|Bifidobacterium breve, Dialister invisus|Bifidobacterium breve, Dialister microaerophilus|Bifidobacterium breve, Dorea formicigenerans|Bifidobacterium breve, Dorea longicatena|Bifidobacterium breve, Eggerthella lenta|Bifidobacterium breve, Eikenella corrodens|Bifidobacterium breve, Enterobacter cancerogenus|Bifidobacterium breve, Enterobacter cloacae|Bifidobacterium breve, Enterococcus faecalis|Bifidobacterium breve, Enterococcus faecium|Bifidobacterium breve, Enterococcus gallinarum|Bifidobacterium breve, Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium breve, Escherichia coli|Bifidobacterium breve, Escherichia coli|Bifidobacterium breve, Escherichia fergusonii|Bifidobacterium breve, Ethanoligenens harbinense|Bifidobacterium breve, Eubacterium cellulosolvens|Bifidobacterium breve, Eubacterium eligens|Bifidobacterium breve, Eubacterium hallii|Bifidobacterium breve, Eubacterium limosum|Bifidobacterium breve, Eubacterium rectale|Bifidobacterium breve, Eubacterium siraeum|Bifidobacterium breve, Eubacterium ventriosum|Bifidobacterium breve, Faecalibacterium prausnitzii|Bifidobacterium breve, Finegoldia magna|Bifidobacterium breve, Fusobacterium gonidiaformans|Bifidobacterium breve, Fusobacterium mortiferum|Bifidobacterium breve, Fusobacterium nucleatum|Bifidobacterium breve, Fusobacterium varium|Bifidobacterium breve, Gardnerella vaginalis|Bifidobacterium breve, Gemella haemolysans|Bifidobacterium breve, Gemella morbillorum|Bifidobacterium breve, Gordonibacter pamelaiae|Bifidobacterium breve, Granulicatella adiacens|Bifidobacterium breve, Granulicatella elegans|Bifidobacterium breve, Haemophilus influenzae|Bifidobacterium breve, Haemophilus parainfluenzae|Bifidobacterium breve, Helicobacter pullorum|Bifidobacterium breve, Helicobacter pylori|Bifidobacterium breve, Holdemania filiformis|Bifidobacterium breve, Kingella oralis|Bifidobacterium breve, Klebsiella pneumoniae|Bifidobacterium breve, Klebsiella varicola|Bifidobacterium breve, Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium breve, Lactobacillus acidophilus|Bifidobacterium breve, Lactobacillus amylovorus|Bifidobacterium breve, Lactobacillus brevis|Bifidobacterium breve, Lactobacillus casei|Bifidobacterium breve, Lactobacillus crispatus|Bifidobacterium breve, Lactobacillus

delbrueckii|Bifidobacterium breve,Lactobacillus fermentum|Bifidobacterium breve,Lactobacillus gasseri|Bifidobacterium breve,Lactobacillus iners|Bifidobacterium breve,Lactobacillus jensenii|Bifidobacterium breve,Lactobacillus johnsonii|Bifidobacterium breve,Lactobacillus paracasei|Bifidobacterium breve,Lactobacillus plantarum|Bifidobacterium breve,Lactobacillus reuteri|Bifidobacterium breve,Lactobacillus rhamnosus|Bifidobacterium breve,Lactobacillus ruminis|Bifidobacterium breve,Lactobacillus sakei|Bifidobacterium breve,Lactobacillus salivarius|Bifidobacterium breve,Lactococcus lactis|Bifidobacterium breve,Lautropia mirabilis|Bifidobacterium breve,Leuconostoc citreum|Bifidobacterium breve,Leuconostoc gascomitatum|Bifidobacterium breve,Leuconostoc mesenteroides|Bifidobacterium breve,Listeria monocytogenes|Bifidobacterium breve,Marvinbryantia formatexigens|Bifidobacterium breve,Megamonas hypermegalae|Bifidobacterium breve,Megasphaera micronuciformis|Bifidobacterium breve,Methanobrevibacter smithii|Bifidobacterium breve,Methanosphaera stadtmanae|Bifidobacterium breve,Methylobacterium radiotolerans|Bifidobacterium breve,Mitsukella multacida|Bifidobacterium breve,Mobiluncus curtisii|Bifidobacterium breve,Mycoplasma hominis|Bifidobacterium breve,Neisseria mucosa|Bifidobacterium breve,Odoribacter splanchnicus|Bifidobacterium breve,Olsenella ulii|Bifidobacterium breve,Oribacterium sinus|Bifidobacterium breve,Oxalobacter formigenes|Bifidobacterium breve,Parabacteroides distans|Bifidobacterium breve,Parabacteroides johnsonii|Bifidobacterium breve,Parabacteroides merdae|Bifidobacterium breve,Parvimonas micra|Bifidobacterium breve,Pediococcus acidilactici|Bifidobacterium breve,Pediococcus pentosaceus|Bifidobacterium breve,Peptoniphilus duerdenii|Bifidobacterium breve,Peptoniphilus harei|Bifidobacterium breve,Peptoniphilus lacrimalis|Bifidobacterium breve,Peptostreptococcus anaerobius|Bifidobacterium breve,Peptostreptococcus stomatis|Bifidobacterium breve,Porphyromonas asaccharolytica|Bifidobacterium breve,Porphyromonas uenonis|Bifidobacterium breve,Prevotella amnii|Bifidobacterium breve,Prevotella bergensis|Bifidobacterium breve,Prevotella bivia|Bifidobacterium breve,Prevotella buccae|Bifidobacterium breve,Prevotella buccalis|Bifidobacterium breve,Prevotella copri|Bifidobacterium breve,Prevotella disiens|Bifidobacterium breve,Prevotella melaninogenica|Bifidobacterium breve,Prevotella multiformis|Bifidobacterium breve,Prevotella oralis|Bifidobacterium breve,Prevotella oris|Bifidobacterium breve,Prevotella salivae|Bifidobacterium breve,Prevotella timonensis|Bifidobacterium breve,Propionibacterium acnes|Bifidobacterium breve,Propionibacterium freudenreichii|Bifidobacterium breve,Proteus mirabilis|Bifidobacterium breve,Proteus penneri|Bifidobacterium breve,Pseudoflavonifractor capillosus|Bifidobacterium breve,Pseudomonas aeruginosa|Bifidobacterium breve,Pseudomonas fluorescens|Bifidobacterium breve,Pseudomonas putida|Bifidobacterium breve,Pseudoramibacter alactolyticus|Bifidobacterium breve,Pyranidobacter piscicola|Bifidobacterium breve,Rhodopseudomonas palustris|Bifidobacterium breve,Roseburia intestinalis|Bifidobacterium breve,Roseburia inulinivorans|Bifidobacterium breve,Rothia dentocariosa|Bifidobacterium breve,Rothia mucilaginosa|Bifidobacterium breve,Ruminococcus albus|Bifidobacterium breve,Ruminococcus bromii|Bifidobacterium breve,Ruminococcus gnavus|Bifidobacterium breve,Ruminococcus lactaris|Bifidobacterium breve,Ruminococcus obeum|Bifidobacterium breve,Ruminococcus torques|Bifidobacterium breve,Selenomonas spuitigena|Bifidobacterium breve,Shigella boydii|Bifidobacterium breve,Shigella dysenteriae|Bifidobacterium breve,Shigella sonnei|Bifidobacterium breve,Slackia exigua|Bifidobacterium breve,Solobacterium moorei|Bifidobacterium breve,Staphylococcus aureus|Bifidobacterium breve,Staphylococcus epidermidis|Bifidobacterium breve,Staphylococcus hominis|Bifidobacterium breve,Staphylococcus saprophyticus|Bifidobacterium breve,Staphylococcus warneri|Bifidobacterium breve,Streptococcus agalactiae|Bifidobacterium breve,Streptococcus anginosus|Bifidobacterium breve,Streptococcus australis|Bifidobacterium breve,Streptococcus bovis|Bifidobacterium breve,Streptococcus cristatus|Bifidobacterium breve,Streptococcus dysgalactiae|Bifidobacterium breve,Streptococcus equinus|Bifidobacterium breve,Streptococcus gordonii|Bifidobacterium breve,Streptococcus infantarius|Bifidobacterium breve,Streptococcus infantis|Bifidobacterium breve,Streptococcus mitis|Bifidobacterium breve,Streptococcus mutans|Bifidobacterium breve,Streptococcus oralis|Bifidobacterium breve,Streptococcus parasanguinis|Bifidobacterium breve,Streptococcus peroris|Bifidobacterium breve,Streptococcus pneumoniae|Bifidobacterium breve,Streptococcus salivarius|Bifidobacterium breve,Streptococcus sanguinis|Bifidobacterium breve,Streptococcus thermophilus|Bifidobacterium breve,Streptococcus vestibularis|Bifidobacterium breve,Subdoligranulum variabile|Bifidobacterium breve,Succinatimonas hippelii|Bifidobacterium breve,Sutterella wadsworthensis|Bifidobacterium breve,Tropheryma whippelii|Bifidobacterium breve,Veillonella atypica|Bifidobacterium breve,Veillonella dispar|Bifidobacterium breve,Veillonella parvula|Bifidobacterium breve,Vitellivallis vadensis|Bifidobacterium catenulatum,Bifidobacterium catenulatum,Bifidobacterium dentium,Bifidobacterium catenulatum,Bifidobacterium infantis|Bifidobacterium catenulatum,Bifidobacterium longum|Bifidobacterium catenulatum,Bifidobacterium pseudocatenulatum|Bifidobacterium catenulatum,Bilophila wadsworthia|Bifidobacterium catenulatum,Blautia henseni|Bifidobacterium catenulatum,Blautia hydrogenotrophica|Bifidobacterium catenulatum,Blautia producta|Bifidobacterium catenulatum,Blautia schinkii|Bifidobacterium catenulatum,Brevibacterium linens|Bifidobacterium catenulatum,Bruella cetii|Bifidobacterium catenulatum,Bruella suis|Bifidobacterium catenulatum,Bulleidia extructa|Bifidobacterium catenulatum,Butyrivibrio crossotus|Bifidobacterium catenulatum,Campylobacter concisus|Bifidobacterium catenulatum,Campylobacter curvus|Bifidobacterium catenulatum,Campylobacter gracilis|Bifidobacterium catenulatum,Campylobacter hominis|Bifidobacterium catenulatum,Capnocytophaga ochracea|Bifidobacterium catenulatum,Cardiobacterium hominis|Bifidobacterium catenulatum,Catenibacterium mitsuokai|Bifidobacterium catenulatum,Catonella morbi|Bifidobacterium catenulatum,Citrobacter koseri|Bifidobacterium catenulatum,Clostridium asparagiforme|Bifidobacterium catenulatum,Clostridium bartlettii|Bifidobacterium catenulatum,Clostridium botleae|Bifidobacterium catenulatum,Clostridium botulinum|Bifidobacterium catenulatum,Clostridium butyricum|Bifidobacterium catenulatum,Clostridium difficile|Bifidobacterium catenulatum,Clostridium disporicum|Bifidobacterium catenulatum,Clostridium hathewayi|Bifidobacterium catenulatum,Clostridium hylemonae|Bifidobacterium catenulatum,Clostridium innocuum|Bifidobacterium catenulatum,Clostridium leptum|Bifidobacterium catenulatum,Clostridium mayombeyi|Bifidobacterium catenulatum,Clostridium methylpentosum|Bifidobacterium catenulatum,Clostridium nexile|Bifidobacterium catenulatum,Clostridium orbiscindens|Bifidobacterium catenulatum,Clostridium perfringens|Bifidobacterium catenulatum,Clostridium saccharolyticum|Bifidobacterium catenulatum,Clostridium scindens|Bifidobacterium catenulatum,Clostridium symbiosum|Bifidobacterium catenulatum,Clostridium tertium|Bifidobacterium catenulatum,Collinsella aerofaciens|Bifidobacterium catenulatum,Collinsella intestinalis|Bifidobacterium catenulatum,Collinsella stercoris|Bifidobacterium catenulatum,Coprobacillus sp. D7|Bifidobacterium catenulatum,Coproccoccus catus|Bifidobacterium catenulatum,Coproccoccus comes|Bifidobacterium catenulatum,Coproccoccus eutactus|Bifidobacterium catenulatum,Corynebacterium aurimicosum|Bifidobacterium catenulatum,Corynebacterium matruchotii|Bifidobacterium catenulatum,Cryptobacterium curtum|Bifidobacterium catenulatum,Desulfovibrio desulfuricans|Bifidobacterium catenulatum,Desulfovibrio piger|Bifidobacterium catenulatum,Dialister invisus|Bifidobacterium catenulatum,Dialister microaerophilus|Bifidobacterium catenulatum,Dorea formicigenerans|Bifidobacterium catenulatum,Dorea longicatena|Bifidobacterium catenulatum,Eggerthella lenta|Bifidobacterium catenulatum,Eikenella corrodens|Bifidobacterium catenulatum,Enterobacter cancerogenus|Bifidobacterium catenulatum,Enterobacter cloacae|Bifidobacterium catenulatum,Enterococcus faecalis|Bifidobacterium catenulatum,Enterococcus faecium|Bifidobacterium catenulatum,Enterococcus gallinarum|Bifidobacterium catenulatum,Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium catenulatum,Escherichia coli|Bifidobacterium catenulatum,Escherichia fergusonii|Bifidobacterium catenulatum,Ethanoligenes harbinense|Bifidobacterium catenulatum,Eubacterium cellulolosens|Bifidobacterium catenulatum,Eubacterium eligens|Bifidobacterium catenulatum,Eubacterium hallii|Bifidobacterium catenulatum,Eubacterium limosum|Bifidobacterium catenulatum,Eubacterium rectale|Bifidobacterium catenulatum,Eubacterium siraeum|Bifidobacterium catenulatum,Eubacterium ventriosum|Bifidobacterium catenulatum,Faecalibacterium prausnitzii|Bifidobacterium catenulatum,Finegoldia magna|Bifidobacterium catenulatum,Fusobacterium gonidiaformans|Bifidobacterium catenulatum,Fusobacterium mortiferum|Bifidobacterium catenulatum,Fusobacterium nucleatum|Bifidobacterium catenulatum,Fusobacterium varium|Bifidobacterium catenulatum,Gardnerella vaginalis|Bifidobacterium catenulatum,Gemella haemolysans|Bifidobacterium catenulatum,Gemella morbillorum|Bifidobacterium catenulatum,Gordonibacter panelae|Bifidobacterium catenulatum,Granulicatella adiacens|Bifidobacterium catenulatum,Granulicatella elegans|Bifidobacterium catenulatum,Haemophilus influenzae|Bifidobacterium catenulatum,Haemophilus parainfluenzae|Bifidobacterium catenulatum,Helicobacter pullorum|Bifidobacterium catenulatum,Helicobacter pylori|Bifidobacterium catenulatum,Holdemania filiformis|Bifidobacterium catenulatum,Kingella oralis|Bifidobacterium catenulatum,Klebsiella pneumoniae|Bifidobacterium catenulatum,Klebsiella varicola|Bifidobacterium catenulatum,Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium catenulatum,Lactobacillus acidophilus|Bifidobacterium catenulatum,Lactobacillus amylovorus|Bifidobacterium catenulatum,Lactobacillus fermentis|Bifidobacterium catenulatum,Lactobacillus casei|Bifidobacterium catenulatum,Lactobacillus crispatus|Bifidobacterium catenulatum,Lactobacillus delbrueckii|Bifidobacterium catenulatum,Lactobacillus fermentum|Bifidobacterium catenulatum,Lactobacillus gasseri|Bifidobacterium catenulatum,Lactobacillus iners|Bifidobacterium catenulatum,Lactobacillus jensenii|Bifidobacterium catenulatum,Lactobacillus johnsonii|Bifidobacterium catenulatum,Lactobacillus paracasei|Bifidobacterium catenulatum,Lactobacillus plantarum|Bifidobacterium catenulatum,Lactobacillus reuteri|Bifidobacterium catenulatum,Lactobacillus rhamnosus|Bifidobacterium catenulatum,Lactococcus lactis|Bifidobacterium catenulatum,Lautropia mirabilis|Bifidobacterium catenulatum,Leuconostoc citreum|Bifidobacterium catenulatum,Leuconostoc gascomitatum|Bifidobacterium catenulatum,Leuconostoc mesenteroides|Bifidobacterium catenulatum,Listeria monocytogenes|Bifidobacterium catenulatum,Marvinbryantia formatexigens|Bifidobacterium catenulatum,Megamonas hypermegalae|Bifidobacterium catenulatum,Megasphaera micronuciformis|Bifidobacterium catenulatum,Methanobrevibacter smithii|Bifidobacterium catenulatum,Methanosphaera stadtmanae|Bifidobacterium catenulatum,Methylobacterium radiotolerans|Bifidobacterium catenulatum,Mitsukella multacida|Bifidobacterium catenulatum,Mobiluncus curtisii|Bifidobacterium catenulatum,Mycoplasma hominis|Bifidobacterium catenulatum,Oxalobacter formigenes|Bifidobacterium catenulatum,Odoribacter splanchnicus|Bifidobacterium catenulatum,Olsenella ulii|Bifidobacterium catenulatum,Oribacterium sinus|Bifidobacterium catenulatum,Oxalobacter formigenes|Bifidobacterium catenulatum,Parabacteroides distans|Bifidobacterium catenulatum,Parabacteroides johnsonii|Bifidobacterium catenulatum,Parabacteroides merdae|Bifidobacterium catenulatum,Parvimonas micra|Bifidobacterium catenulatum,Pediococcus acidilactici|Bifidobacterium catenulatum,Pediococcus pentosaceus|Bifidobacterium catenulatum,Peptoniphilus duerdenii|Bifidobacterium catenulatum,Peptoniphilus harei|Bifidobacterium catenulatum,Peptoniphilus lacrimalis|Bifidobacterium catenulatum,Peptostreptococcus anaerobius|Bifidobacterium catenulatum,Peptostreptococcus stomatis|Bifidobacterium catenulatum,Porphyromonas asaccharolytica|Bifidobacterium catenulatum,Porphyromonas uenonis|Bifidobacterium catenulatum,Prevotella amnii|Bifidobacterium catenulatum,Prevotella bergensis|Bifidobacterium catenulatum,Prevotella bivia|Bifidobacterium catenulatum,Prevotella buccae|Bifidobacterium catenulatum,Prevotella buccalis|Bifidobacterium catenulatum,Prevotella copri|Bifidobacterium catenulatum,Prevotella disiens|Bifidobacterium catenulatum,Prevotella melaninogenica|Bifidobacterium catenulatum,Prevotella multiformis|Bifidobacterium catenulatum,Prevotella oralis|Bifidobacterium catenulatum,Prevotella oris|Bifidobacterium catenulatum,Prevotella salivae|Bifidobacterium catenulatum,Prevotella timonensis|Bifidobacterium catenulatum,Propionibacterium acnes|Bifidobacterium catenulatum,Propionibacterium freudenreichii|Bifidobacterium catenulatum,Proteus mirabilis|Bifidobacterium catenulatum,Proteus penneri|Bifidobacterium catenulatum,Pseudoflavonifractor capillosus|Bifidobacterium catenulatum,Pseudomonas aeruginosa|Bifidobacterium catenulatum,Pseudomonas fluorescens|Bifidobacterium catenulatum,Pseudomonas putida|Bifidobacterium catenulatum,Pseudoramibacter alactolyticus|Bifidobacterium catenulatum,Pyranidobacter piscicola|Bifidobacterium catenulatum,Rhodopseudomonas palustris|Bifidobacterium catenulatum,Roseburia intestinalis|Bifidobacterium catenulatum,Roseburia inulinivorans|Bifidobacterium catenulatum,Rothia dentocariosa|Bifidobacterium catenulatum,Rothia mucilaginosa|Bifidobacterium catenulatum,Ruminococcus albus|Bifidobacterium catenulatum,Ruminococcus bromii|Bifidobacterium catenulatum,Ruminococcus gnavus|Bifidobacterium catenulatum,Ruminococcus lactaris|Bifidobacterium catenulatum,Ruminococcus obeum|Bifidobacterium catenulatum,Ruminococcus torques|Bifidobacterium catenulatum,Selenomonas spuitigena|Bifidobacterium catenulatum,Shigella boydii|Bifidobacterium catenulatum,Shigella dysenteriae|Bifidobacterium catenulatum,Shigella sonnei|Bifidobacterium catenulatum,Slackia exigua|Bifidobacterium catenulatum,Solobacterium moorei|Bifidobacterium catenulatum,Staphylococcus aureus|Bifidobacterium catenulatum,Staphylococcus epidermidis|Bifidobacterium catenulatum,Staphylococcus hominis|Bifidobacterium catenulatum,Staphylococcus saprophyticus|Bifidobacterium catenulatum,Staphylococcus warneri|Bifidobacterium catenulatum,Streptococcus agalactiae|Bifidobacterium catenulatum,Streptococcus anginosus|Bifidobacterium catenulatum,Streptococcus australis|Bifidobacterium catenulatum,Streptococcus bovis|Bifidobacterium catenulatum,Streptococcus cristatus|Bifidobacterium catenulatum,Streptococcus dysgalactiae|Bifidobacterium catenulatum,Streptococcus equinus|Bifidobacterium catenulatum,Streptococcus gordonii|Bifidobacterium catenulatum,Streptococcus infantarius|Bifidobacterium catenulatum,Streptococcus infantis|Bifidobacterium catenulatum,Streptococcus mitis|Bifidobacterium catenulatum,Streptococcus mutans|Bifidobacterium catenulatum,Streptococcus oralis|Bifidobacterium catenulatum,Streptococcus parasanguinis|Bifidobacterium catenulatum,Streptococcus peroris|Bifidobacterium catenulatum,Streptococcus pneumoniae|Bifidobacterium catenulatum,Streptococcus salivarius|Bifidobacterium catenulatum,Streptococcus sanguinis|Bifidobacterium catenulatum,Streptococcus thermophilus|Bifidobacterium catenulatum,Streptococcus vestibularis|Bifidobacterium catenulatum,Subdoligranulum variabile|Bifidobacterium catenulatum,Succinatimonas hippelii|Bifidobacterium catenulatum,Sutterella wadsworthensis|Bifidobacterium catenulatum,Tropheryma whippelii|Bifidobacterium catenulatum,Veillonella atypica|Bifidobacterium catenulatum,Veillonella dispar|Bifidobacterium catenulatum,Veillonella parvula|Bifidobacterium catenulatum,Vitellivallis vadensis|Bifidobacterium catenulatum,Bifidobacterium dentium,Bifidobacterium dentium,Bifidobacterium infantis|Bifidobacterium dentium,Bifidobacterium longum|Bifidobacterium dentium,Bifidobacterium pseudocatenulatum|Bifidobacterium dentium,Bilophila wadsworthia|Bifidobacterium dentium,Blautia henseni|Bifidobacterium dentium,Blautia hydrogenotrophica|Bifidobacterium dentium,Blautia producta|Bifidobacterium dentium,Blautia schinkii|Bifidobacterium dentium,Brevibacterium linens|Bifidobacterium dentium,Bruella cetii|Bifidobacterium dentium,Bruella suis|Bifidobacterium dentium,Bulleidia extructa|Bifidobacterium dentium,Butyrivibrio crossotus|Bifidobacterium dentium,Campylobacter concisus|Bifidobacterium dentium,Campylobacter curvus|Bifidobacterium dentium,Campylobacter gracilis|Bifidobacterium dentium,Campylobacter hominis|Bifidobacterium dentium,Capnocytophaga ochracea|Bifidobacterium dentium,Cardiobacterium hominis|Bifidobacterium dentium,Catenibacterium mitsuokai|Bifidobacterium dentium,Catonella morbi|Bifidobacterium dentium,Citrobacter koseri|Bifidobacterium dentium,Clostridium asparagiforme|Bifidobacterium dentium,Clostridium bartlettii|Bifidobacterium dentium,Clostridium botleae|Bifidobacterium dentium,Clostridium botulinum|Bifidobacterium dentium,Clostridium butyricum|Bifidobacterium dentium,Clostridium difficile|Bifidobacterium dentium,Clostridium disporicum|Bifidobacterium dentium,Clostridium hathewayi|Bifidobacterium dentium,Clostridium hylemonae|Bifidobacterium dentium,Clostridium innocuum|Bifidobacterium dentium,Clostridium leptum|Bifidobacterium dentium,Clostridium mayombeyi|Bifidobacterium dentium,Clostridium methylpentosum|Bifidobacterium dentium,Clostridium nexile|Bifidobacterium dentium,Clostridium perfringens|Bifidobacterium dentium,Clostridium saccharolyticum|Bifidobacterium dentium,Clostridium scindens|Bifidobacterium dentium,Clostridium symbiosum|Bifidobacterium dentium,Clostridium tertium|Bifidobacterium dentium,Collinsella aerofaciens|Bifidobacterium

dentium, Collinsella intestinalis|Bifidobacterium dentium, Collinsella stercoris|Bifidobacterium dentium, Coprobacillus sp. D7|Bifidobacterium dentium, Coprococcus catus|Bifidobacterium dentium, Coprococcus comes|Bifidobacterium dentium, Coprococcus eutactus|Bifidobacterium dentium, Corynebacterium aurimucosum|Bifidobacterium dentium, Corynebacterium matruchotii|Bifidobacterium dentium, Cryptobacterium curtum|Bifidobacterium dentium, Desulfovibrio desulfuricans|Bifidobacterium dentium, Desulfovibrio piger|Bifidobacterium dentium, Dialister invisus|Bifidobacterium dentium, Dialister microaerophilus|Bifidobacterium dentium, Dorea formicigenerans|Bifidobacterium dentium, Dorea longicatena|Bifidobacterium dentium, Eggerthella lenta|Bifidobacterium dentium, Eikenella corrodens|Bifidobacterium dentium, Enterobacter cancerogenus|Bifidobacterium dentium, Enterobacter cloacae|Bifidobacterium dentium, Enterococcus faecalis|Bifidobacterium dentium, Enterococcus faecium|Bifidobacterium dentium, Enterococcus gallinarum|Bifidobacterium dentium, Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium dentium, Escherichia coli|Bifidobacterium dentium, Escherichia fergusonii|Bifidobacterium dentium, Ethanoligenens harbinense|Bifidobacterium dentium, Eubacterium cellulosolvens|Bifidobacterium dentium, Eubacterium eligens|Bifidobacterium dentium, Eubacterium hallii|Bifidobacterium dentium, Eubacterium limosum|Bifidobacterium dentium, Eubacterium rectale|Bifidobacterium dentium, Eubacterium siraeum|Bifidobacterium dentium, Eubacterium ventriosum|Bifidobacterium dentium, Faecalibacterium prausnitzii|Bifidobacterium dentium, Finegoldia magna|Bifidobacterium dentium, Fusobacterium gonidiaformans|Bifidobacterium dentium, Fusobacterium mortiferum|Bifidobacterium dentium, Fusobacterium nucleatum|Bifidobacterium dentium, Fusobacterium varium|Bifidobacterium dentium, Gardnerella vaginalis|Bifidobacterium dentium, Gemella haemolysans|Bifidobacterium dentium, Gemella morbillorum|Bifidobacterium dentium, Gordonibacter pamelaeae|Bifidobacterium dentium, Granulicatella adiacens|Bifidobacterium dentium, Granulicatella elegans|Bifidobacterium dentium, Haemophilus influenzae|Bifidobacterium dentium, Haemophilus parainfluenzae|Bifidobacterium dentium, Helicobacter pullorum|Bifidobacterium dentium, Helicobacter pylori|Bifidobacterium dentium, Holdemania filiformis|Bifidobacterium dentium, Kingella oralis|Bifidobacterium dentium, Klebsiella pneumoniae|Bifidobacterium dentium, Klebsiella variicola|Bifidobacterium dentium, Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium dentium, Lactobacillus acidophilus|Bifidobacterium dentium, Lactobacillus amylovorus|Bifidobacterium dentium, Lactobacillus brevis|Bifidobacterium dentium, Lactobacillus casei|Bifidobacterium dentium, Lactobacillus crispatus|Bifidobacterium dentium, Lactobacillus delbrueckii|Bifidobacterium dentium, Lactobacillus fermentum|Bifidobacterium dentium, Lactobacillus gasseri|Bifidobacterium dentium, Lactobacillus iners|Bifidobacterium dentium, Lactobacillus jensenii|Bifidobacterium dentium, Lactobacillus johnsonii|Bifidobacterium dentium, Lactobacillus paracasei|Bifidobacterium dentium, Lactobacillus plantarum|Bifidobacterium dentium, Lactobacillus reuteri|Bifidobacterium dentium, Lactobacillus rhamnosus|Bifidobacterium dentium, Lactobacillus ruminis|Bifidobacterium dentium, Lactobacillus sakei|Bifidobacterium dentium, Lactobacillus salivarius|Bifidobacterium dentium, Lactococcus lactis|Bifidobacterium dentium, Lautropia mirabilis|Bifidobacterium dentium, Leuconostoc citreum|Bifidobacterium dentium, Leuconostoc gasicomitatum|Bifidobacterium dentium, Leuconostoc mesenteroides|Bifidobacterium dentium, Listeria monocytogenes|Bifidobacterium dentium, Marvinbryantia formatexigens|Bifidobacterium dentium, Megamonas hypermegale|Bifidobacterium dentium, Megaspheara micronuciformis|Bifidobacterium dentium, Methanobrevibacter smithii|Bifidobacterium dentium, Methanospheara stadmanae|Bifidobacterium dentium, Methylobacterium radiotolerans|Bifidobacterium dentium, Mitsuokella multacida|Bifidobacterium dentium, Mobiluncus curtisii|Bifidobacterium dentium, Mycoplasma hominis|Bifidobacterium dentium, Neisseria mucosa|Bifidobacterium dentium, Odoribacter splanchnicus|Bifidobacterium dentium, Olsenella uli|Bifidobacterium dentium, Oribacterium sinus|Bifidobacterium dentium, Oxalobacter formigenes|Bifidobacterium dentium, Parabacteroides distasonis|Bifidobacterium dentium, Parabacteroides johnsonii|Bifidobacterium dentium, Parabacteroides merdae|Bifidobacterium dentium, Parvimonas micra|Bifidobacterium dentium, Pediococcus acidilactici|Bifidobacterium dentium, Pediococcus pentosaceus|Bifidobacterium dentium, Peptoniphilus duerdenii|Bifidobacterium dentium, Peptoniphilus harei|Bifidobacterium dentium, Peptoniphilus lacrimalis|Bifidobacterium dentium, Peptostreptococcus anaerobius|Bifidobacterium dentium, Peptostreptococcus stomatis|Bifidobacterium dentium, Porphyromonas asaccharolytica|Bifidobacterium dentium, Porphyromonas uenonis|Bifidobacterium dentium, Prevotella amnii|Bifidobacterium dentium, Prevotella bergensis|Bifidobacterium dentium, Prevotella bivia|Bifidobacterium dentium, Prevotella buccae|Bifidobacterium dentium, Prevotella buccalis|Bifidobacterium dentium, Prevotella copri|Bifidobacterium dentium, Prevotella disiens|Bifidobacterium dentium, Prevotella melaninogenica|Bifidobacterium dentium, Prevotella multiformis|Bifidobacterium dentium, Prevotella oralis|Bifidobacterium dentium, Prevotella oris|Bifidobacterium dentium, Prevotella salivae|Bifidobacterium dentium, Prevotella timonensis|Bifidobacterium dentium, Propionibacterium acnes|Bifidobacterium dentium, Propionibacterium freudenreichii|Bifidobacterium dentium, Proteus mirabilis|Bifidobacterium dentium, Proteus penneri|Bifidobacterium dentium, Pseudoflavonifractor capillosus|Bifidobacterium dentium, Pseudomonas aeruginosa|Bifidobacterium dentium, Pseudomonas fluorescens|Bifidobacterium dentium, Pseudomonas putida|Bifidobacterium dentium, Pseudoramibacter alactolyticus|Bifidobacterium dentium, Pyramidobacter piscisols|Bifidobacterium dentium, Rhodopseudomonas palustris|Bifidobacterium dentium, Roseburia intestinalis|Bifidobacterium dentium, Roseburia inulinivorans|Bifidobacterium dentium, Rothia dentocariosa|Bifidobacterium dentium, Rothia mucilaginosa|Bifidobacterium dentium, Ruminoecoccus albus|Bifidobacterium dentium, Ruminoecoccus bromii|Bifidobacterium dentium, Ruminoecoccus gnavus|Bifidobacterium dentium, Ruminoecoccus lactaris|Bifidobacterium dentium, Ruminoecoccus obeum|Bifidobacterium dentium, Ruminoecoccus torques|Bifidobacterium dentium, Selenomonas spungena|Bifidobacterium dentium, Shigella boydii|Bifidobacterium dentium, Shigella dysenteriae|Bifidobacterium dentium, Shigella sonnei|Bifidobacterium dentium, Slackia exigua|Bifidobacterium dentium, Solobacterium moorei|Bifidobacterium dentium, Staphylococcus aureus|Bifidobacterium dentium, Staphylococcus epidermidis|Bifidobacterium dentium, Staphylococcus hominis|Bifidobacterium dentium, Staphylococcus saprophyticus|Bifidobacterium dentium, Staphylococcus warneri|Bifidobacterium dentium, Streptococcus agalactiae|Bifidobacterium dentium, Streptococcus anginosus|Bifidobacterium dentium, Streptococcus australis|Bifidobacterium dentium, Streptococcus bovis|Bifidobacterium dentium, Streptococcus cristatus|Bifidobacterium dentium, Streptococcus dysgalactiae|Bifidobacterium dentium, Streptococcus equinus|Bifidobacterium dentium, Streptococcus gordonii|Bifidobacterium dentium, Streptococcus infantarius|Bifidobacterium dentium, Streptococcus infantis|Bifidobacterium dentium, Streptococcus mitis|Bifidobacterium dentium, Streptococcus mutans|Bifidobacterium dentium, Streptococcus oralis|Bifidobacterium dentium, Streptococcus parasanguinis|Bifidobacterium dentium, Streptococcus peroris|Bifidobacterium dentium, Streptococcus pneumoniae|Bifidobacterium dentium, Streptococcus salivarius|Bifidobacterium dentium, Streptococcus sanguinis|Bifidobacterium dentium, Streptococcus thermophilus|Bifidobacterium dentium, Streptococcus vestibularis|Bifidobacterium dentium, Subdoligranulum variable|Bifidobacterium dentium, Succinatimonas hippei|Bifidobacterium dentium, Sutterella wadsworthensis|Bifidobacterium dentium, Tropheryma whippelii|Bifidobacterium dentium, Veillonella atypica|Bifidobacterium dentium, Veillonella dispar|Bifidobacterium dentium, Veillonella parvula|Bifidobacterium dentium, Victivallis vadensis|Bifidobacterium infantis, Bifidobacterium infantis|Bifidobacterium infantis, Bifidobacterium longum|Bifidobacterium infantis, Bifidobacterium pseudocatenulatum|Bifidobacterium infantis, Bilophila wadsworthia|Bifidobacterium infantis, Blautia hansenii|Bifidobacterium infantis, Blautia hydrogenotrophica|Bifidobacterium infantis, Blautia producta|Bifidobacterium infantis, Blautia schinkii|Bifidobacterium infantis, Brevibacterium linens|Bifidobacterium infantis, Brucella cetii|Bifidobacterium infantis, Brucella suis|Bifidobacterium infantis, Bulleidia extructalis|Bifidobacterium infantis, Butyrivibrio crossotus|Bifidobacterium infantis, Campylobacter concisus|Bifidobacterium infantis, Campylobacter curvus|Bifidobacterium infantis, Campylobacter gracilis|Bifidobacterium infantis, Campylobacter hominis|Bifidobacterium infantis, Capnocytophaga ochracea|Bifidobacterium infantis, Cardiobacterium hominis|Bifidobacterium infantis, Catenibacterium mitsuokai|Bifidobacterium infantis, Catonella morbi|Bifidobacterium infantis, Citrobacter koseri|Bifidobacterium infantis, Clostridium asparagiforme|Bifidobacterium infantis, Clostridium butletii|Bifidobacterium infantis, Clostridium butyricum|Bifidobacterium infantis, Clostridium butyricum|Bifidobacterium infantis, Clostridium difficile|Bifidobacterium infantis, Clostridium disporicum|Bifidobacterium infantis, Clostridium hathewayi|Bifidobacterium infantis, Clostridium hylemonae|Bifidobacterium infantis, Clostridium innocuum|Bifidobacterium infantis, Clostridium leptum|Bifidobacterium infantis, Clostridium maynabei|Bifidobacterium infantis, Clostridium methylpentosum|Bifidobacterium infantis, Clostridium nexile|Bifidobacterium infantis, Clostridium orbiscindens|Bifidobacterium infantis, Clostridium perfringens|Bifidobacterium infantis, Clostridium saccharolyticum|Bifidobacterium infantis, Clostridium scindens|Bifidobacterium infantis, Clostridium symbiosum|Bifidobacterium infantis, Clostridium teringum|Bifidobacterium infantis, Collinsella aerofaciens|Bifidobacterium infantis, Collinsella intestinalis|Bifidobacterium infantis, Collinsella stercoris|Bifidobacterium infantis, Coprobacillus sp. D7|Bifidobacterium infantis, Coprococcus catus|Bifidobacterium infantis, Coprococcus comes|Bifidobacterium infantis, Coprococcus eutactus|Bifidobacterium infantis, Corynebacterium aurimucosum|Bifidobacterium infantis, Corynebacterium matruchotii|Bifidobacterium infantis, Cryptobacterium curtum|Bifidobacterium infantis, Desulfovibrio desulfuricans|Bifidobacterium infantis, Desulfovibrio piger|Bifidobacterium infantis, Dialister invisus|Bifidobacterium infantis, Dialister microaerophilus|Bifidobacterium infantis, Dorea formicigenerans|Bifidobacterium infantis, Dorea longicatena|Bifidobacterium infantis, Eggerthella lenta|Bifidobacterium infantis, Eikenella corrodens|Bifidobacterium infantis, Enterobacter cancerogenus|Bifidobacterium infantis, Enterobacter cloacae|Bifidobacterium infantis, Enterococcus faecalis|Bifidobacterium infantis, Enterococcus faecium|Bifidobacterium infantis, Enterococcus gallinarum|Bifidobacterium infantis, Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium infantis, Escherichia coli|Bifidobacterium infantis, Escherichia fergusonii|Bifidobacterium infantis, Ethanoligenens harbinense|Bifidobacterium infantis, Eubacterium cellulosolvens|Bifidobacterium infantis, Eubacterium eligens|Bifidobacterium infantis, Eubacterium hallii|Bifidobacterium infantis, Eubacterium limosum|Bifidobacterium infantis, Eubacterium rectale|Bifidobacterium infantis, Eubacterium siraeum|Bifidobacterium infantis, Eubacterium ventriosum|Bifidobacterium infantis, Faecalibacterium prausnitzii|Bifidobacterium infantis, Finegoldia magna|Bifidobacterium infantis, Fusobacterium gonidiaformans|Bifidobacterium infantis, Fusobacterium mortiferum|Bifidobacterium infantis, Fusobacterium nucleatum|Bifidobacterium infantis, Fusobacterium varium|Bifidobacterium infantis, Gardnerella vaginalis|Bifidobacterium infantis, Gemella haemolysans|Bifidobacterium infantis, Gemella morbillorum|Bifidobacterium infantis, Gordonibacter pamelaeae|Bifidobacterium infantis, Granulicatella adiacens|Bifidobacterium infantis, Granulicatella elegans|Bifidobacterium infantis, Haemophilus influenzae|Bifidobacterium infantis, Haemophilus parainfluenzae|Bifidobacterium infantis, Helicobacter pullorum|Bifidobacterium infantis, Helicobacter pylori|Bifidobacterium infantis, Holdemania filiformis|Bifidobacterium infantis, Kingella oralis|Bifidobacterium infantis, Klebsiella pneumoniae|Bifidobacterium infantis, Klebsiella variicola|Bifidobacterium infantis, Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium infantis, Lactobacillus acidophilus|Bifidobacterium infantis, Lactobacillus amylovorus|Bifidobacterium infantis, Lactobacillus brevis|Bifidobacterium infantis, Lactobacillus casei|Bifidobacterium infantis, Lactobacillus crispatus|Bifidobacterium infantis, Lactobacillus delbrueckii|Bifidobacterium infantis, Lactobacillus fermentum|Bifidobacterium infantis, Lactobacillus gasseri|Bifidobacterium infantis, Lactobacillus iners|Bifidobacterium infantis, Lactobacillus jensenii|Bifidobacterium infantis, Lactobacillus johnsonii|Bifidobacterium infantis, Lactobacillus paracasei|Bifidobacterium infantis, Lactobacillus plantarum|Bifidobacterium infantis, Lactobacillus reuteri|Bifidobacterium infantis, Lactobacillus rhamnosus|Bifidobacterium infantis, Lactobacillus ruminis|Bifidobacterium infantis, Lactobacillus sakei|Bifidobacterium infantis, Lactobacillus salivarius|Bifidobacterium infantis, Lactococcus lactis|Bifidobacterium infantis, Lautropia mirabilis|Bifidobacterium infantis, Leuconostoc citreum|Bifidobacterium infantis, Leuconostoc gasicomitatum|Bifidobacterium infantis, Leuconostoc mesenteroides|Bifidobacterium infantis, Listeria monocytogenes|Bifidobacterium infantis, Marvinbryantia formatexigens|Bifidobacterium infantis, Megamonas hypermegale|Bifidobacterium infantis, Megaspheara micronuciformis|Bifidobacterium infantis, Methanobrevibacter smithii|Bifidobacterium infantis, Methanospheara stadmanae|Bifidobacterium infantis, Methylobacterium radiotolerans|Bifidobacterium infantis, Mitsuokella multacida|Bifidobacterium infantis, Mobiluncus curtisii|Bifidobacterium infantis, Mycoplasma hominis|Bifidobacterium infantis, Neisseria mucosa|Bifidobacterium infantis, Odoribacter splanchnicus|Bifidobacterium infantis, Olsenella uli|Bifidobacterium infantis, Oribacterium sinus|Bifidobacterium infantis, Oxalobacter formigenes|Bifidobacterium infantis, Parabacteroides distasonis|Bifidobacterium infantis, Parabacteroides johnsonii|Bifidobacterium infantis, Parabacteroides merdae|Bifidobacterium infantis, Parvimonas micra|Bifidobacterium infantis, Pediococcus acidilactici|Bifidobacterium infantis, Pediococcus pentosaceus|Bifidobacterium infantis, Peptoniphilus duerdenii|Bifidobacterium infantis, Peptoniphilus harei|Bifidobacterium infantis, Peptoniphilus lacrimalis|Bifidobacterium infantis, Peptostreptococcus anaerobius|Bifidobacterium infantis, Peptostreptococcus stomatis|Bifidobacterium infantis, Porphyromonas asaccharolytica|Bifidobacterium infantis, Porphyromonas uenonis|Bifidobacterium infantis, Prevotella amnii|Bifidobacterium infantis, Prevotella bergensis|Bifidobacterium infantis, Prevotella bivia|Bifidobacterium infantis, Prevotella buccae|Bifidobacterium infantis, Prevotella buccalis|Bifidobacterium infantis, Prevotella copri|Bifidobacterium infantis, Prevotella disiens|Bifidobacterium infantis, Prevotella melaninogenica|Bifidobacterium infantis, Prevotella multiformis|Bifidobacterium infantis, Prevotella oralis|Bifidobacterium infantis, Prevotella oris|Bifidobacterium infantis, Prevotella salivae|Bifidobacterium infantis, Prevotella timonensis|Bifidobacterium infantis, Propionibacterium acnes|Bifidobacterium infantis, Propionibacterium freudenreichii|Bifidobacterium infantis, Proteus mirabilis|Bifidobacterium infantis, Proteus penneri|Bifidobacterium infantis, Pseudoflavonifractor capillosus|Bifidobacterium infantis, Pseudomonas aeruginosa|Bifidobacterium infantis, Pseudomonas fluorescens|Bifidobacterium infantis, Pseudomonas putida|Bifidobacterium infantis, Pseudoramibacter alactolyticus|Bifidobacterium infantis, Pyramidobacter piscisols|Bifidobacterium infantis, Rhodopseudomonas palustris|Bifidobacterium infantis, Roseburia intestinalis|Bifidobacterium infantis, Roseburia inulinivorans|Bifidobacterium infantis, Rothia dentocariosa|Bifidobacterium infantis, Rothia mucilaginosa|Bifidobacterium infantis, Ruminoecoccus albus|Bifidobacterium infantis, Ruminoecoccus bromii|Bifidobacterium infantis, Ruminoecoccus gnavus|Bifidobacterium infantis, Ruminoecoccus lactaris|Bifidobacterium infantis, Ruminoecoccus obeum|Bifidobacterium infantis, Ruminoecoccus torques|Bifidobacterium infantis, Selenomonas spungena|Bifidobacterium infantis, Shigella boydii|Bifidobacterium infantis, Shigella dysenteriae|Bifidobacterium infantis, Shigella sonnei|Bifidobacterium infantis, Slackia exigua|Bifidobacterium infantis, Solobacterium moorei|Bifidobacterium infantis, Staphylococcus aureus|Bifidobacterium infantis, Staphylococcus epidermidis|Bifidobacterium infantis, Staphylococcus hominis|Bifidobacterium infantis, Staphylococcus saprophyticus|Bifidobacterium infantis, Staphylococcus warneri|Bifidobacterium infantis, Streptococcus agalactiae|Bifidobacterium infantis, Streptococcus anginosus|Bifidobacterium infantis, Streptococcus australis|Bifidobacterium infantis, Streptococcus bovis|Bifidobacterium infantis, Streptococcus cristatus|Bifidobacterium infantis, Streptococcus dysgalactiae|Bifidobacterium infantis, Streptococcus equinus|Bifidobacterium infantis, Streptococcus gordonii|Bifidobacterium infantis, Streptococcus infantarius|Bifidobacterium infantis, Streptococcus infantis|Bifidobacterium infantis, Streptococcus mitis|Bifidobacterium infantis, Streptococcus mutans|Bifidobacterium infantis, Streptococcus oralis|Bifidobacterium infantis, Streptococcus parasanguinis|Bifidobacterium infantis, Streptococcus peroris|Bifidobacterium infantis, Streptococcus pneumoniae|Bifidobacterium infantis, Streptococcus salivarius|Bifidobacterium infantis, Streptococcus sanguinis|Bifidobacterium infantis, Streptococcus thermophilus|Bifidobacterium infantis, Streptococcus vestibularis|Bifidobacterium infantis, Subdoligranulum variable|Bifidobacterium infantis, Succinatimonas hippei|Bifidobacterium infantis, Sutterella wadsworthensis|Bifidobacterium infantis, Tropheryma whippelii|Bifidobacterium infantis, Veillonella atypica|Bifidobacterium infantis, Veillonella dispar|Bifidobacterium infantis, Veillonella

parvula|Bifidobacterium infantis, Victivallis vadensis|Bifidobacterium longum, Bifidobacterium longum|Bifidobacterium longum, Bifidobacterium pseudocatenulatum|Bifidobacterium longum, Bilophila wadsworthia|Bifidobacterium longum, Blautia hansenii|Bifidobacterium longum, Blautia hydrogenotrophica|Bifidobacterium longum, Blautia producta|Bifidobacterium longum, Blautia schinkii|Bifidobacterium longum, Brevibacterium linens|Bifidobacterium longum, Brucella ceti|Bifidobacterium longum, Brucella suis|Bifidobacterium longum, Bulleidia extructa|Bifidobacterium longum, Butyrivibrio crossotus|Bifidobacterium longum, Campylobacter concisus|Bifidobacterium longum, Campylobacter curvus|Bifidobacterium longum, Campylobacter gracilis|Bifidobacterium longum, Campylobacter hominis|Bifidobacterium longum, Capnocytophaga ochracea|Bifidobacterium longum, Cardiobacterium hominis|Bifidobacterium longum, Catenibacterium mitsuokai|Bifidobacterium longum, Holdemania morbi|Bifidobacterium longum, Citrobacter koseri|Bifidobacterium longum, Clostridium asparagiforme|Bifidobacterium longum, Clostridium bartlettii|Bifidobacterium longum, Clostridium boltea|Bifidobacterium longum, Clostridium botulinum|Bifidobacterium longum, Clostridium butyricum|Bifidobacterium longum, Clostridium difficile|Bifidobacterium longum, Clostridium disporicum|Bifidobacterium longum, Clostridium mayombeii|Bifidobacterium longum, Clostridium methylopentosum|Bifidobacterium longum, Clostridium nexile|Bifidobacterium longum, Clostridium leptum|Bifidobacterium longum, Clostridium mayombeii|Bifidobacterium longum, Clostridium methylpentosum|Bifidobacterium longum, Clostridium nexile|Bifidobacterium longum, Clostridium orbiscindens|Bifidobacterium longum, Clostridium perfringens|Bifidobacterium longum, Clostridium saccharolyticum|Bifidobacterium longum, Clostridium scindens|Bifidobacterium longum, Clostridium symbiosum|Bifidobacterium longum, Clostridium tertium|Bifidobacterium longum, Collinsella aerofaciens|Bifidobacterium longum, Collinsella intestinalis|Bifidobacterium longum, Collinsella stercoris|Bifidobacterium longum, Coprobacillus sp. D7|Bifidobacterium longum, Coprococcus catus|Bifidobacterium longum, Coprococcus comes|Bifidobacterium longum, Coprococcus eutactus|Bifidobacterium longum, Corynebacterium aurimucosum|Bifidobacterium longum, Corynebacterium matruchotii|Bifidobacterium longum, Cryptobacterium curtum|Bifidobacterium longum, Desulfovibrio desulfuricans|Bifidobacterium longum, Desulfovibrio piger|Bifidobacterium longum, Dialister invisus|Bifidobacterium longum, Dialister microaerophilus|Bifidobacterium longum, Dorea formicigenerans|Bifidobacterium longum, Dorea longicatena|Bifidobacterium longum, Eggerthella lenta|Bifidobacterium longum, Eikenella corrodens|Bifidobacterium longum, Enterobacter cancerogenus|Bifidobacterium longum, Enterobacter cloacae|Bifidobacterium longum, Enterococcus faecalis|Bifidobacterium longum, Enterococcus gallinarum|Bifidobacterium longum, Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium longum, Escherichia coli|Bifidobacterium longum, Escherichia fergusonii|Bifidobacterium longum, Ethanoligenens harbinense|Bifidobacterium longum, Eubacterium cellulolvensis|Bifidobacterium longum, Eubacterium eligens|Bifidobacterium longum, Eubacterium hallii|Bifidobacterium longum, Eubacterium limosum|Bifidobacterium longum, Eubacterium rectale|Bifidobacterium longum, Eubacterium siraeum|Bifidobacterium longum, Eubacterium ventriosum|Bifidobacterium longum, Faecalibacterium prausnitzii|Bifidobacterium longum, Finegoldia magna|Bifidobacterium longum, Fusobacterium gonidiaformans|Bifidobacterium longum, Fusobacterium mortiferum|Bifidobacterium longum, Fusobacterium nucleatum|Bifidobacterium longum, Fusobacterium varium|Bifidobacterium longum, Gardnerella vaginalis|Bifidobacterium longum, Gemella haemolysans|Bifidobacterium longum, Gemella morbillorum|Bifidobacterium longum, Gordonia pamelaeae|Bifidobacterium longum, Granulicatella adiacens|Bifidobacterium longum, Granulicatella elegans|Bifidobacterium longum, Haemophilus influenzae|Bifidobacterium longum, Haemophilus parainfluenzae|Bifidobacterium longum, Helicobacter pylori|Bifidobacterium longum, Helicobacter pullorum|Bifidobacterium longum, Holdemania filiformis|Bifidobacterium longum, Kingella oralis|Bifidobacterium longum, Klebsiella pneumoniae|Bifidobacterium longum, Klebsiella variicola|Bifidobacterium longum, Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium longum, Lactobacillus acidophilus|Bifidobacterium longum, Lactobacillus amylovorus|Bifidobacterium longum, Lactobacillus brevis|Bifidobacterium longum, Lactobacillus casei|Bifidobacterium longum, Lactobacillus crispatus|Bifidobacterium longum, Lactobacillus delbrueckii|Bifidobacterium longum, Lactobacillus fermentum|Bifidobacterium longum, Lactobacillus gasseri|Bifidobacterium longum, Lactobacillus iners|Bifidobacterium longum, Lactobacillus jensenii|Bifidobacterium longum, Lactobacillus johnsonii|Bifidobacterium longum, Lactobacillus paracasei|Bifidobacterium longum, Lactobacillus plantarum|Bifidobacterium longum, Lactobacillus reuteri|Bifidobacterium longum, Lactobacillus rhamnosus|Bifidobacterium longum, Lactobacillus ruminis|Bifidobacterium longum, Lactobacillus sakei|Bifidobacterium longum, Lactobacillus salivarius|Bifidobacterium longum, Lactococcus lactis|Bifidobacterium longum, Lautropia mirabilis|Bifidobacterium longum, Leuconostoc citreum|Bifidobacterium longum, Leuconostoc gasicomitatum|Bifidobacterium longum, Leuconostoc mesenteroides|Bifidobacterium longum, Listeria monocytogenes|Bifidobacterium longum, Marvinbryantia formatexigens|Bifidobacterium longum, Meganona hypermegale|Bifidobacterium longum, Megaspheara micronuciformis|Bifidobacterium longum, Methanobrevibacter smithii|Bifidobacterium longum, Methanospheara stadmanae|Bifidobacterium longum, Methylobacterium radiotolerans|Bifidobacterium longum, Mitsuokella multicauda|Bifidobacterium longum, Mobiluncus curtisii|Bifidobacterium longum, Mycoplasma hominis|Bifidobacterium longum, Neisseria mucosa|Bifidobacterium longum, Odoribacter splanchnicus|Bifidobacterium longum, Olsenella uli|Bifidobacterium longum, Oribacterium sinus|Bifidobacterium longum, Oxalobacter formigenes|Bifidobacterium longum, Parabacteroides distans|Bifidobacterium longum, Parabacteroides johnsonii|Bifidobacterium longum, Parabacteroides merdae|Bifidobacterium longum, Parvimonas micra|Bifidobacterium longum, Pedicoccus acidilactici|Bifidobacterium longum, Pedicoccus pentosaceus|Bifidobacterium longum, Peptoniphilus duerdenii|Bifidobacterium longum, Peptoniphilus harei|Bifidobacterium longum, Peptoniphilus lacrimalis|Bifidobacterium longum, Peptostreptococcus anaerobius|Bifidobacterium longum, Peptostreptococcus stomatis|Bifidobacterium longum, Porphyromonas asaccharolytica|Bifidobacterium longum, Porphyromonas uenonis|Bifidobacterium longum, Prevotella amnii|Bifidobacterium longum, Prevotella bergensis|Bifidobacterium longum, Prevotella bivia|Bifidobacterium longum, Prevotella buccae|Bifidobacterium longum, Prevotella buccalis|Bifidobacterium longum, Prevotella copri|Bifidobacterium longum, Prevotella disiens|Bifidobacterium longum, Prevotella melaninogenica|Bifidobacterium longum, Prevotella multiformis|Bifidobacterium longum, Prevotella oralis|Bifidobacterium longum, Prevotella oris|Bifidobacterium longum, Prevotella salivae|Bifidobacterium longum, Prevotella timonensis|Bifidobacterium longum, Propionibacterium acnes|Bifidobacterium longum, Propionibacterium freudenreichii|Bifidobacterium longum, Proteus mirabilis|Bifidobacterium longum, Proteus penneri|Bifidobacterium longum, Pseudoflavonifractor capillosus|Bifidobacterium longum, Pseudomonas aeruginosa|Bifidobacterium longum, Pseudomonas fluorescens|Bifidobacterium longum, Pseudomonas putida|Bifidobacterium longum, Pseudoramibacter alactolyticus|Bifidobacterium longum, Pyramidobacter piscocolens|Bifidobacterium longum, Rhodospseudomonas palustris|Bifidobacterium longum, Roseburia intestinalis|Bifidobacterium longum, Roseburia inulinivorans|Bifidobacterium longum, Rothia dentocariosa|Bifidobacterium longum, Rothia mucilaginosa|Bifidobacterium longum, Ruminococcus albus|Bifidobacterium longum, Ruminococcus bromii|Bifidobacterium longum, Ruminococcus gnavus|Bifidobacterium longum, Ruminococcus lactaris|Bifidobacterium longum, Ruminococcus obeum|Bifidobacterium longum, Ruminococcus torques|Bifidobacterium longum, Selenomonas spungena|Bifidobacterium longum, Shigella boydii|Bifidobacterium longum, Shigella dysenteriae|Bifidobacterium longum, Shigella sonnei|Bifidobacterium longum, Slackia exigua|Bifidobacterium longum, Solobacterium moorei|Bifidobacterium longum, Staphylococcus aureus|Bifidobacterium longum, Staphylococcus epidermidis|Bifidobacterium longum, Staphylococcus hominis|Bifidobacterium longum, Staphylococcus saprophyticus|Bifidobacterium longum, Staphylococcus warneri|Bifidobacterium longum, Streptococcus agalactiae|Bifidobacterium longum, Streptococcus anginosus|Bifidobacterium longum, Streptococcus australis|Bifidobacterium longum, Streptococcus bovis|Bifidobacterium longum, Streptococcus cristatus|Bifidobacterium longum, Streptococcus dysgalactiae|Bifidobacterium longum, Streptococcus equinus|Bifidobacterium longum, Streptococcus gordonii|Bifidobacterium longum, Streptococcus infantarius|Bifidobacterium longum, Streptococcus infantis|Bifidobacterium longum, Streptococcus mutans|Bifidobacterium longum, Streptococcus mutans|Bifidobacterium longum, Streptococcus oralis|Bifidobacterium longum, Streptococcus parasanguinis|Bifidobacterium longum, Streptococcus peroris|Bifidobacterium longum, Streptococcus pneumoniae|Bifidobacterium longum, Streptococcus salivarius|Bifidobacterium longum, Streptococcus sanguinis|Bifidobacterium longum, Streptococcus thermophilus|Bifidobacterium longum, Streptococcus vestibularis|Bifidobacterium longum, Subdoligranulum variable|Bifidobacterium longum, Succinatobacterium hippei|Bifidobacterium longum, Sutterella wadsworthensis|Bifidobacterium longum, Tropheryma whippelii|Bifidobacterium longum, Veillonella atypica|Bifidobacterium longum, Veillonella dispar|Bifidobacterium longum, Veillonella parvula|Bifidobacterium longum, Victivallis vadensis|Bifidobacterium pseudocatenulatum, Bifidobacterium pseudocatenulatum, Bilophila wadsworthia|Bifidobacterium pseudocatenulatum, Blautia hansenii|Bifidobacterium pseudocatenulatum, Blautia hydrogenotrophica|Bifidobacterium pseudocatenulatum, Blautia producta|Bifidobacterium pseudocatenulatum, Blautia schinkii|Bifidobacterium pseudocatenulatum, Brevibacterium linens|Bifidobacterium pseudocatenulatum, Brucella ceti|Bifidobacterium pseudocatenulatum, Brucella suis|Bifidobacterium pseudocatenulatum, Bulleidia extructa|Bifidobacterium pseudocatenulatum, Butyrivibrio crossotus|Bifidobacterium pseudocatenulatum, Campylobacter concisus|Bifidobacterium pseudocatenulatum, Campylobacter curvus|Bifidobacterium pseudocatenulatum, Campylobacter gracilis|Bifidobacterium pseudocatenulatum, Campylobacter hominis|Bifidobacterium pseudocatenulatum, Capnocytophaga ochracea|Bifidobacterium pseudocatenulatum, Cardiobacterium hominis|Bifidobacterium pseudocatenulatum, Catenibacterium mitsuokai|Bifidobacterium pseudocatenulatum, Catonella morbi|Bifidobacterium pseudocatenulatum, Citrobacter koseri|Bifidobacterium pseudocatenulatum, Clostridium asparagiforme|Bifidobacterium pseudocatenulatum, Clostridium bartlettii|Bifidobacterium pseudocatenulatum, Clostridium boltea|Bifidobacterium pseudocatenulatum, Clostridium botulinum|Bifidobacterium pseudocatenulatum, Clostridium butyricum|Bifidobacterium pseudocatenulatum, Clostridium difficile|Bifidobacterium pseudocatenulatum, Clostridium disporicum|Bifidobacterium pseudocatenulatum, Clostridium leptum|Bifidobacterium pseudocatenulatum, Clostridium mayombeii|Bifidobacterium pseudocatenulatum, Clostridium methylpentosum|Bifidobacterium pseudocatenulatum, Clostridium nexile|Bifidobacterium pseudocatenulatum, Clostridium orbiscindens|Bifidobacterium pseudocatenulatum, Clostridium perfringens|Bifidobacterium pseudocatenulatum, Clostridium saccharolyticum|Bifidobacterium pseudocatenulatum, Clostridium scindens|Bifidobacterium pseudocatenulatum, Clostridium symbiosum|Bifidobacterium pseudocatenulatum, Clostridium tertium|Bifidobacterium pseudocatenulatum, Collinsella aerofaciens|Bifidobacterium pseudocatenulatum, Collinsella intestinalis|Bifidobacterium pseudocatenulatum, Collinsella stercoris|Bifidobacterium pseudocatenulatum, Coprobacillus sp. D7|Bifidobacterium pseudocatenulatum, Coprococcus catus|Bifidobacterium pseudocatenulatum, Coprococcus comes|Bifidobacterium pseudocatenulatum, Coprococcus eutactus|Bifidobacterium pseudocatenulatum, Corynebacterium aurimucosum|Bifidobacterium pseudocatenulatum, Corynebacterium matruchotii|Bifidobacterium pseudocatenulatum, Cryptobacterium curtum|Bifidobacterium pseudocatenulatum, Desulfovibrio desulfuricans|Bifidobacterium pseudocatenulatum, Desulfovibrio piger|Bifidobacterium pseudocatenulatum, Dialister invisus|Bifidobacterium pseudocatenulatum, Dialister microaerophilus|Bifidobacterium pseudocatenulatum, Dorea formicigenerans|Bifidobacterium pseudocatenulatum, Dorea longicatena|Bifidobacterium pseudocatenulatum, Eggerthella lenta|Bifidobacterium pseudocatenulatum, Eikenella corrodens|Bifidobacterium pseudocatenulatum, Enterobacter cancerogenus|Bifidobacterium pseudocatenulatum, Enterobacter cloacae|Bifidobacterium pseudocatenulatum, Enterococcus faecalis|Bifidobacterium pseudocatenulatum, Enterococcus faecium|Bifidobacterium pseudocatenulatum, Enterococcus gallinarum|Bifidobacterium pseudocatenulatum, Erysipelotrichaceae bacterium 3_1_53|Bifidobacterium pseudocatenulatum, Escherichia coli|Bifidobacterium pseudocatenulatum, Escherichia fergusonii|Bifidobacterium pseudocatenulatum, Ethanoligenens harbinense|Bifidobacterium pseudocatenulatum, Eubacterium cellulolvensis|Bifidobacterium pseudocatenulatum, Eubacterium eligens|Bifidobacterium pseudocatenulatum, Eubacterium hallii|Bifidobacterium pseudocatenulatum, Eubacterium limosum|Bifidobacterium pseudocatenulatum, Eubacterium rectale|Bifidobacterium pseudocatenulatum, Eubacterium siraeum|Bifidobacterium pseudocatenulatum, Eubacterium ventriosum|Bifidobacterium pseudocatenulatum, Faecalibacterium prausnitzii|Bifidobacterium pseudocatenulatum, Finegoldia magna|Bifidobacterium pseudocatenulatum, Fusobacterium gonidiaformans|Bifidobacterium pseudocatenulatum, Fusobacterium mortiferum|Bifidobacterium pseudocatenulatum, Fusobacterium nucleatum|Bifidobacterium pseudocatenulatum, Fusobacterium varium|Bifidobacterium pseudocatenulatum, Gardnerella vaginalis|Bifidobacterium pseudocatenulatum, Gemella haemolysans|Bifidobacterium pseudocatenulatum, Gemella morbillorum|Bifidobacterium pseudocatenulatum, Gordonia pamelaeae|Bifidobacterium pseudocatenulatum, Granulicatella adiacens|Bifidobacterium pseudocatenulatum, Granulicatella elegans|Bifidobacterium pseudocatenulatum, Haemophilus influenzae|Bifidobacterium pseudocatenulatum, Haemophilus parainfluenzae|Bifidobacterium pseudocatenulatum, Helicobacter pylori|Bifidobacterium pseudocatenulatum, Helicobacter pullorum|Bifidobacterium pseudocatenulatum, Helicobacter pylori|Bifidobacterium pseudocatenulatum, Holdemania filiformis|Bifidobacterium pseudocatenulatum, Kingella oralis|Bifidobacterium pseudocatenulatum, Klebsiella pneumoniae|Bifidobacterium pseudocatenulatum, Klebsiella variicola|Bifidobacterium pseudocatenulatum, Lachnospiraceae bacterium 5_1_57FAA|Bifidobacterium pseudocatenulatum, Lactobacillus acidophilus|Bifidobacterium pseudocatenulatum, Lactobacillus amylovorus|Bifidobacterium pseudocatenulatum, Lactobacillus brevis|Bifidobacterium pseudocatenulatum, Lactobacillus casei|Bifidobacterium pseudocatenulatum, Lactobacillus crispatus|Bifidobacterium pseudocatenulatum, Lactobacillus delbrueckii|Bifidobacterium pseudocatenulatum, Lactobacillus fermentum|Bifidobacterium pseudocatenulatum, Lactobacillus gasseri|Bifidobacterium pseudocatenulatum, Lactobacillus iners|Bifidobacterium pseudocatenulatum, Lactobacillus jensenii|Bifidobacterium pseudocatenulatum, Lactobacillus johnsonii|Bifidobacterium pseudocatenulatum, Lactobacillus paracasei|Bifidobacterium pseudocatenulatum, Lactobacillus plantarum|Bifidobacterium pseudocatenulatum, Lactobacillus reuteri|Bifidobacterium pseudocatenulatum, Lactobacillus rhamnosus|Bifidobacterium pseudocatenulatum, Lactobacillus ruminis|Bifidobacterium pseudocatenulatum, Lactobacillus sakei|Bifidobacterium pseudocatenulatum, Lactobacillus salivarius|Bifidobacterium pseudocatenulatum, Lactococcus lactis|Bifidobacterium pseudocatenulatum, Lautropia mirabilis|Bifidobacterium pseudocatenulatum, Leuconostoc citreum|Bifidobacterium pseudocatenulatum, Leuconostoc gasicomitatum|Bifidobacterium pseudocatenulatum, Leuconostoc mesenteroides|Bifidobacterium pseudocatenulatum, Listeria monocytogenes|Bifidobacterium pseudocatenulatum, Marvinbryantia formatexigens|Bifidobacterium pseudocatenulatum, Meganona hypermegale|Bifidobacterium pseudocatenulatum, Megaspheara micronuciformis|Bifidobacterium pseudocatenulatum, Methanobrevibacter smithii|Bifidobacterium pseudocatenulatum, Methanospheara stadmanae|Bifidobacterium pseudocatenulatum, Methylobacterium radiotolerans|Bifidobacterium pseudocatenulatum, Mitsuokella multicauda|Bifidobacterium pseudocatenulatum, Mobiluncus curtisii|Bifidobacterium pseudocatenulatum, Mycoplasma hominis|Bifidobacterium pseudocatenulatum, Neisseria mucosa|Bifidobacterium pseudocatenulatum, Odoribacter splanchnicus|Bifidobacterium pseudocatenulatum, Olsenella uli|Bifidobacterium pseudocatenulatum, Oribacterium sinus|Bifidobacterium pseudocatenulatum, Oxalobacter formigenes|Bifidobacterium pseudocatenulatum, Parabacteroides distans|Bifidobacterium pseudocatenulatum, Parabacteroides johnsonii|Bifidobacterium pseudocatenulatum, Parabacteroides merdae|Bifidobacterium pseudocatenulatum, Parvimonas micra|Bifidobacterium pseudocatenulatum, Pedicoccus acidilactici|Bifidobacterium pseudocatenulatum, Pedicoccus pentosaceus|Bifidobacterium pseudocatenulatum, Peptoniphilus duerdenii|Bifidobacterium pseudocatenulatum, Peptoniphilus harei|Bifidobacterium pseudocatenulatum, Peptoniphilus lacrimalis|Bifidobacterium pseudocatenulatum, Peptostreptococcus anaerobius|Bifidobacterium pseudocatenulatum, Peptostreptococcus stomatis|Bifidobacterium

131

132

producta, *Odoribacter splanchnicus*[*Blaudia producta*, *Olsenella ulii*][*Blaudia producta*, *Oribacterium sinus*][*Blaudia producta*, *Oxalobacter formigenes*][*Blaudia producta*, *Parabacteroides distans*][*Blaudia producta*, *Parabacteroides johnsonii*][*Blaudia producta*, *Parabacteroides merdae*][*Blaudia producta*, *Parvimonas micra*][*Blaudia producta*, *Pediococcus acidilactici*][*Blaudia producta*, *Pediococcus pentosaceus*][*Blaudia producta*, *Peptoniphilus duerdenii*][*Blaudia producta*, *Peptoniphilus harei*][*Blaudia producta*, *Peptoniphilus lacrimalis*][*Blaudia producta*, *Peptostreptococcus anaerobius*][*Blaudia producta*, *Peptostreptococcus stomatis*][*Blaudia producta*, *Porphyromonas asaccharolytica*][*Blaudia producta*, *Porphyromonas uenonis*][*Blaudia producta*, *Prevotella amnii*][*Blaudia producta*, *Prevotella bergensis*][*Blaudia producta*, *Prevotella bivia*][*Blaudia producta*, *Prevotella buccae*][*Blaudia producta*, *Prevotella buccalis*][*Blaudia producta*, *Prevotella copri*][*Blaudia producta*, *Prevotella disiens*][*Blaudia producta*, *Prevotella melaninogenica*][*Blaudia producta*, *Prevotella multiformis*][*Blaudia producta*, *Prevotella oralis*][*Blaudia producta*, *Prevotella oris*][*Blaudia producta*, *Prevotella salivae*][*Blaudia producta*, *Prevotella timonensis*][*Blaudia producta*, *Propionibacterium acnes*][*Blaudia producta*, *Propionibacterium freudenreichii*][*Blaudia producta*, *Proteus mirabilis*][*Blaudia producta*, *Proteus penneri*][*Blaudia producta*, *Pseudoflavonifractor capillosus*][*Blaudia producta*, *Pseudomonas aeruginosa*][*Blaudia producta*, *Pseudomonas fluorescens*][*Blaudia producta*, *Pseudomonas putida*][*Blaudia producta*, *Pseudoramibacter alactolyticus*][*Blaudia producta*, *Pyramidobacter piscicola*][*Blaudia producta*, *Rhodopseudomonas palustris*][*Blaudia producta*, *Roseburia intestinalis*][*Blaudia producta*, *Roseburia inulinivorans*][*Blaudia producta*, *Rothia dentocariosa*][*Blaudia producta*, *Rothia mucilaginosa*][*Blaudia producta*, *Ruminococcus albus*][*Blaudia producta*, *Ruminococcus bromii*][*Blaudia producta*, *Ruminococcus gnavus*][*Blaudia producta*, *Ruminococcus lactaris*][*Blaudia producta*, *Ruminococcus obeum*][*Blaudia producta*, *Ruminococcus torques*][*Blaudia producta*, *Selenomonas spungena*][*Blaudia producta*, *Shigella boydii*][*Blaudia producta*, *Shigella dysenteriae*][*Blaudia producta*, *Shigella sonnei*][*Blaudia producta*, *Slackia exigua*][*Blaudia producta*, *Solobacterium moorei*][*Blaudia producta*, *Staphylococcus aureus*][*Blaudia producta*, *Staphylococcus epidermidis*][*Blaudia producta*, *Staphylococcus hominis*][*Blaudia producta*, *Staphylococcus saprophyticus*][*Blaudia producta*, *Staphylococcus warneri*][*Blaudia producta*, *Streptococcus agalactiae*][*Blaudia producta*, *Streptococcus anginosus*][*Blaudia producta*, *Streptococcus australis*][*Blaudia producta*, *Streptococcus bovis*][*Blaudia producta*, *Streptococcus cristatus*][*Blaudia producta*, *Streptococcus dysgalactiae*][*Blaudia producta*, *Streptococcus equinus*][*Blaudia producta*, *Streptococcus gordonii*][*Blaudia producta*, *Streptococcus infantarius*][*Blaudia producta*, *Streptococcus infantis*][*Blaudia producta*, *Streptococcus mitis*][*Blaudia producta*, *Streptococcus mutans*][*Blaudia producta*, *Streptococcus oralis*][*Blaudia producta*, *Streptococcus parasanguinis*][*Blaudia producta*, *Streptococcus peroris*][*Blaudia producta*, *Streptococcus pneumoniae*][*Blaudia producta*, *Streptococcus salivarius*][*Blaudia producta*, *Streptococcus sanguinis*][*Blaudia producta*, *Streptococcus thermophilus*][*Blaudia producta*, *Streptococcus vestibularis*][*Blaudia producta*, *Subdoligranulum variable*][*Blaudia producta*, *Succinatimonas hippel*][*Blaudia producta*, *Sutterella wadsworthensis*][*Blaudia producta*, *Tropheryma whippelii*][*Blaudia producta*, *Veillonella atypica*][*Blaudia producta*, *Veillonella dispar*][*Blaudia producta*, *Veillonella parvula*][*Blaudia producta*, *Victivallis vadensis*][*Blaudia producta*, *Blaudia schinkii*][*Blaudia schinkii*, *Brevibacterium linens*][*Blaudia schinkii*, *Brucella suis*][*Blaudia schinkii*, *Bulleidia extracta*][*Blaudia schinkii*, *Butyrivibrio crossotus*][*Blaudia schinkii*, *Campylobacter concisus*][*Blaudia schinkii*, *Campylobacter curvus*][*Blaudia schinkii*, *Campylobacter gracilis*][*Blaudia schinkii*, *Campylobacter hominis*][*Blaudia schinkii*, *Capnocytophaga ochracea*][*Blaudia schinkii*, *Cardiobacterium hominis*][*Blaudia schinkii*, *Catenibacterium mitsuokai*][*Blaudia schinkii*, *Catonella morbi*][*Blaudia schinkii*, *Citrobacter koseri*][*Blaudia schinkii*, *Clostridium asparagiforme*][*Blaudia schinkii*, *Clostridium bartlettii*][*Blaudia schinkii*, *Clostridium boltae*][*Blaudia schinkii*, *Clostridium botulinum*][*Blaudia schinkii*, *Clostridium butyricum*][*Blaudia schinkii*, *Clostridium difficile*][*Blaudia schinkii*, *Clostridium disporicum*][*Blaudia schinkii*, *Clostridium hathewayi*][*Blaudia schinkii*, *Clostridium hylemonae*][*Blaudia schinkii*, *Clostridium innocuum*][*Blaudia schinkii*, *Clostridium leptum*][*Blaudia schinkii*, *Clostridium mayombeii*][*Blaudia schinkii*, *Clostridium methylpentosum*][*Blaudia schinkii*, *Clostridium nexile*][*Blaudia schinkii*, *Clostridium orbiscindens*][*Blaudia schinkii*, *Clostridium perfringens*][*Blaudia schinkii*, *Clostridium saccharolyticum*][*Blaudia schinkii*, *Clostridium scindens*][*Blaudia schinkii*, *Clostridium symbiosum*][*Blaudia schinkii*, *Clostridium tertium*][*Blaudia schinkii*, *Collinsella aerofaciens*][*Blaudia schinkii*, *Collinsella intestinalis*][*Blaudia schinkii*, *Collinsella stercoris*][*Blaudia schinkii*, *Coprobacillus* sp. D7][*Blaudia schinkii*, *Coprococcus catus*][*Blaudia schinkii*, *Coprococcus comes*][*Blaudia schinkii*, *Coprococcus eutactus*][*Blaudia schinkii*, *Corynebacterium aurimucosum*][*Blaudia schinkii*, *Corynebacterium matruchotii*][*Blaudia schinkii*, *Cryptobacterium curtum*][*Blaudia schinkii*, *Desulfovibrio desulfuricans*][*Blaudia schinkii*, *Desulfovibrio piger*][*Blaudia schinkii*, *Dialister invisus*][*Blaudia schinkii*, *Dialister microaerophilus*][*Blaudia schinkii*, *Dorea formicigenerans*][*Blaudia schinkii*, *Dorea longicatena*][*Blaudia schinkii*, *Eggerthella lenta*][*Blaudia schinkii*, *Eikenella corrodens*][*Blaudia schinkii*, *Enterobacter cancerogenus*][*Blaudia schinkii*, *Enterobacter cloacae*][*Blaudia schinkii*, *Enterococcus faecalis*][*Blaudia schinkii*, *Enterococcus faecium*][*Blaudia schinkii*, *Enterococcus gallinarum*][*Blaudia schinkii*, *Erysipelotrichaceae bacterium* 3_1_53][*Blaudia schinkii*, *Escherichia coli*][*Blaudia schinkii*, *Escherichia fergusonii*][*Blaudia schinkii*, *Ethanoligenens harbinensis*][*Blaudia schinkii*, *Eubacterium cellulosolvens*][*Blaudia schinkii*, *Eubacterium eligens*][*Blaudia schinkii*, *Eubacterium hallii*][*Blaudia schinkii*, *Eubacterium limosum*][*Blaudia schinkii*, *Eubacterium limosum*][*Blaudia schinkii*, *Eubacterium rectale*][*Blaudia schinkii*, *Eubacterium siraeum*][*Blaudia schinkii*, *Eubacterium ventriosum*][*Blaudia schinkii*, *Faecalibacterium prausnitzii*][*Blaudia schinkii*, *Finigoldia magna*][*Blaudia schinkii*, *Fusobacterium gonidiaformans*][*Blaudia schinkii*, *Fusobacterium mortiferum*][*Blaudia schinkii*, *Fusobacterium nucleatum*][*Blaudia schinkii*, *Fusobacterium varium*][*Blaudia schinkii*, *Gardnerella vaginalis*][*Blaudia schinkii*, *Gemella haemolyans*][*Blaudia schinkii*, *Gemella morbillorum*][*Blaudia schinkii*, *Gordonibacter panamae*][*Blaudia schinkii*, *Granulicatella adiacens*][*Blaudia schinkii*, *Granulicatella elegans*][*Blaudia schinkii*, *Haemophilus influenzae*][*Blaudia schinkii*, *Haemophilus parainfluenzae*][*Blaudia schinkii*, *Helicobacter pullorum*][*Blaudia schinkii*, *Helicobacter pylori*][*Blaudia schinkii*, *Holdemania filiformis*][*Blaudia schinkii*, *Kingella oralis*][*Blaudia schinkii*, *Klebsiella pneumoniae*][*Blaudia schinkii*, *Klebsiella variicola*][*Blaudia schinkii*, *Lachnospiraceae bacterium* 5_1_57FAA][*Blaudia schinkii*, *Lactobacillus acidophilus*][*Blaudia schinkii*, *Lactobacillus amylovorus*][*Blaudia schinkii*, *Lactobacillus casei*][*Blaudia schinkii*, *Lactobacillus crispatus*][*Blaudia schinkii*, *Lactobacillus delbrueckii*][*Blaudia schinkii*, *Lactobacillus fermentum*][*Blaudia schinkii*, *Lactobacillus gasseri*][*Blaudia schinkii*, *Lactobacillus iners*][*Blaudia schinkii*, *Lactobacillus jensenii*][*Blaudia schinkii*, *Lactobacillus johnsonii*][*Blaudia schinkii*, *Lactobacillus paracasei*][*Blaudia schinkii*, *Lactobacillus plantarum*][*Blaudia schinkii*, *Lactobacillus reuteri*][*Blaudia schinkii*, *Lactobacillus rhamnosus*][*Blaudia schinkii*, *Lactobacillus ruminis*][*Blaudia schinkii*, *Lactobacillus sakei*][*Blaudia schinkii*, *Lactobacillus salivarius*][*Blaudia schinkii*, *Lactococcus lactis*][*Blaudia schinkii*, *Lautropia mirabilis*][*Blaudia schinkii*, *Leuconostoc citreum*][*Blaudia schinkii*, *Leuconostoc gasicomitatum*][*Blaudia schinkii*, *Leuconostoc mesenteroides*][*Blaudia schinkii*, *Listeria monocytogenes*][*Blaudia schinkii*, *Marvinbryantia formatexigens*][*Blaudia schinkii*, *Megamonas hypermegale*][*Blaudia schinkii*, *Megasphaera micronuciformis*][*Blaudia schinkii*, *Medanobrevibacter smithii*][*Blaudia schinkii*, *Methanospaera stadmanae*][*Blaudia schinkii*, *Methylobacterium radiotolerans*][*Blaudia schinkii*, *Mitsuokella multacida*][*Blaudia schinkii*, *Mobiluncus curtisii*][*Blaudia schinkii*, *Mycoplasma hominis*][*Blaudia schinkii*, *Neisseria mucosa*][*Blaudia schinkii*, *Odoribacter splanchnicus*][*Blaudia schinkii*, *Olsenella ulii*][*Blaudia schinkii*, *Oribacterium sinus*][*Blaudia schinkii*, *Oxalobacter formigenes*][*Blaudia schinkii*, *Parabacteroides distans*][*Blaudia schinkii*, *Parabacteroides johnsonii*][*Blaudia schinkii*, *Parabacteroides merdae*][*Blaudia schinkii*, *Parvimonas micra*][*Blaudia schinkii*, *Pediococcus acidilactici*][*Blaudia schinkii*, *Pediococcus pentosaceus*][*Blaudia schinkii*, *Peptoniphilus duerdenii*][*Blaudia schinkii*, *Peptoniphilus harei*][*Blaudia schinkii*, *Peptoniphilus lacrimalis*][*Blaudia schinkii*, *Peptostreptococcus anaerobius*][*Blaudia schinkii*, *Peptostreptococcus stomatis*][*Blaudia schinkii*, *Porphyromonas asaccharolytica*][*Blaudia schinkii*, *Porphyromonas uenonis*][*Blaudia schinkii*, *Prevotella amnii*][*Blaudia schinkii*, *Prevotella bergensis*][*Blaudia schinkii*, *Prevotella bivia*][*Blaudia schinkii*, *Prevotella buccae*][*Blaudia schinkii*, *Prevotella buccalis*][*Blaudia schinkii*, *Prevotella copri*][*Blaudia schinkii*, *Prevotella disiens*][*Blaudia schinkii*, *Prevotella melaninogenica*][*Blaudia schinkii*, *Prevotella multiformis*][*Blaudia schinkii*, *Prevotella oralis*][*Blaudia schinkii*, *Prevotella oris*][*Blaudia schinkii*, *Prevotella salivae*][*Blaudia schinkii*, *Prevotella timonensis*][*Blaudia schinkii*, *Propionibacterium acnes*][*Blaudia schinkii*, *Propionibacterium freudenreichii*][*Blaudia schinkii*, *Proteus mirabilis*][*Blaudia schinkii*, *Proteus penneri*][*Blaudia schinkii*, *Pseudoflavonifractor capillosus*][*Blaudia schinkii*, *Pseudomonas aeruginosa*][*Blaudia schinkii*, *Pseudomonas fluorescens*][*Blaudia schinkii*, *Pseudomonas putida*][*Blaudia schinkii*, *Pseudoramibacter alactolyticus*][*Blaudia schinkii*, *Pyramidobacter piscicola*][*Blaudia schinkii*, *Rhodopseudomonas palustris*][*Blaudia schinkii*, *Roseburia intestinalis*][*Blaudia schinkii*, *Roseburia*

134

cloacae[Bulleidia extracta,Enterococcus faecalis[Bulleidia extracta,Enterococcus faecium[Bulleidia extracta,Enterococcus gallinarum[Bulleidia extracta,Erysipelotrichaceae bacterium 3_1_53[Bulleidia extracta,Escherichia coli[Bulleidia extracta,Escherichia fergusonii[Bulleidia extracta,Ethanoligenens harbinense[Bulleidia extracta,Eubacterium cellulosolvens[Bulleidia extracta,Eubacterium eligens[Bulleidia extracta,Eubacterium hallii[Bulleidia extracta,Eubacterium limosum[Bulleidia extracta,Eubacterium rectale[Bulleidia extracta,Eubacterium siraeum[Bulleidia extracta,Eubacterium ventriosum[Bulleidia extracta,Faecalibacterium prausnitzii[Bulleidia extracta,Finegoldia magna[Bulleidia extracta,Fusobacterium gonidiaformans[Bulleidia extracta,Fusobacterium mortiferum[Bulleidia extracta,Fusobacterium nucleatum[Bulleidia extracta,Fusobacterium varium[Bulleidia extracta,Gardnerella vaginalis[Bulleidia extracta,Gemella haemolysans[Bulleidia extracta,Gemella morbillorum[Bulleidia extracta,Gordonibacter pamelaeae[Bulleidia extracta,Granulicatella adiacens[Bulleidia extracta,Granulicatella elegans[Bulleidia extracta,Haemophilus influenzae[Bulleidia extracta,Haemophilus parainfluenzae[Bulleidia extracta,Helicobacter pullorum[Bulleidia extracta,Helicobacter pylori[Bulleidia extracta,Holdemania filiformis[Bulleidia extracta,Kingella oralis[Bulleidia extracta,Klebsiella pneumoniae[Bulleidia extracta,Klebsiella varicola[Bulleidia extracta,Lachnospiraceae bacterium 5_1_57FAA[Bulleidia extracta,Lactobacillus acidophilus[Bulleidia extracta,Lactobacillus amylovorus[Bulleidia extracta,Lactobacillus brevis[Bulleidia extracta,Lactobacillus casei[Bulleidia extracta,Lactobacillus crispatus[Bulleidia extracta,Lactobacillus delbrueckii[Bulleidia extracta,Lactobacillus fermentum[Bulleidia extracta,Lactobacillus gasseri[Bulleidia extracta,Lactobacillus iners[Bulleidia extracta,Lactobacillus johnsonii[Bulleidia extracta,Lactobacillus paracasei[Bulleidia extracta,Lactobacillus plantarum[Bulleidia extracta,Lactobacillus reuteri[Bulleidia extracta,Lactobacillus rhamnosus[Bulleidia extracta,Lactobacillus ruminis[Bulleidia extracta,Lactobacillus sakei[Bulleidia extracta,Lactobacillus salivarius[Bulleidia extracta,Lactococcus lactis[Bulleidia extracta,Lautropia mirabilis[Bulleidia extracta,Leuconostoc citreum[Bulleidia extracta,Leuconostoc gasicomitatum[Bulleidia extracta,Leuconostoc mesenteroides[Bulleidia extracta,Listeria monocytogenes[Bulleidia extracta,Marvinbryantia formatexigens[Bulleidia extracta,Megamonas hypermegale[Bulleidia extracta,Megasphaera micronuiformis[Bulleidia extracta,Methanobrevibacter smithii[Bulleidia extracta,Methanospaera stadtnanae[Bulleidia extracta,Methylobacterium radiotolerans[Bulleidia extracta,Mitsuokella multacidia[Bulleidia extracta,Mobiluncus curtisii[Bulleidia extracta,Mycoplasma hominis[Bulleidia extracta,Neisseria mucosa[Bulleidia extracta,Odoribacter splanchnicus[Bulleidia extracta,Olsenella ulii[Bulleidia extracta,Oribacterium sinus[Bulleidia extracta,Oxalobacter formigenes[Bulleidia extracta,Parabacteroides distasonis[Bulleidia extracta,Parabacteroides johnsonii[Bulleidia extracta,Parabacteroides merdae[Bulleidia extracta,Parvimonas micra[Bulleidia extracta,Pediococcus acidilactici[Bulleidia extracta,Pediococcus pentosaceus[Bulleidia extracta,Peptoniphilus duerdenii[Bulleidia extracta,Peptoniphilus harei[Bulleidia extracta,Peptoniphilus lacrimalis[Bulleidia extracta,Peptostreptococcus anaerobius[Bulleidia extracta,Peptostreptococcus stomatis[Bulleidia extracta,Porphyromonas asaccharolytica[Bulleidia extracta,Porphyromonas gasseri[Bulleidia extracta,Porphyromonas unenionis[Bulleidia extracta,Prevotella amnii[Bulleidia extracta,Prevotella bergensis[Bulleidia extracta,Prevotella bivia[Bulleidia extracta,Prevotella buccae[Bulleidia extracta,Prevotella buccalis[Bulleidia extracta,Prevotella copri[Bulleidia extracta,Prevotella disiens[Bulleidia extracta,Prevotella melaninogenica[Bulleidia extracta,Prevotella multiformis[Bulleidia extracta,Prevotella oralis[Bulleidia extracta,Prevotella oris[Bulleidia extracta,Prevotella salivae[Bulleidia extracta,Prevotella timonensis[Bulleidia extracta,Propionibacterium acnes[Bulleidia extracta,Propionibacterium freudenreichii[Bulleidia extracta,Proteus mirabilis[Bulleidia extracta,Proteus penneri[Bulleidia extracta,Pseudoflavonifractor capillosus[Bulleidia extracta,Pseudomonas aeruginosa[Bulleidia extracta,Pseudomonas fluorescens[Bulleidia extracta,Pseudomonas putida[Bulleidia extracta,Pseudoramibacter alactolyticus[Bulleidia extracta,Pyramidobacter piscosoles[Bulleidia extracta,Rhodopseudomonas palustris[Bulleidia extracta,Roseburia intestinalis[Bulleidia extracta,Roseburia inulinivorans[Bulleidia extracta,Rothia dentocariosa[Bulleidia extracta,Rothia mucilaginosa[Bulleidia extracta,Ruminococcus albus[Bulleidia extracta,Ruminococcus bromii[Bulleidia extracta,Ruminococcus gnavus[Bulleidia extracta,Ruminococcus lactaris[Bulleidia extracta,Ruminococcus obeum[Bulleidia extracta,Ruminococcus torques[Bulleidia extracta,Selenomonas sputigena[Bulleidia extracta,Shigella boydii[Bulleidia extracta,Shigella dysenteriae[Bulleidia extracta,Shigella sonnei[Bulleidia extracta,Slackia exigua[Bulleidia extracta,Solobacterium moorei[Bulleidia extracta,Staphylococcus aureus[Bulleidia extracta,Staphylococcus epidermidis[Bulleidia extracta,Staphylococcus hominis[Bulleidia extracta,Staphylococcus saprophyticus[Bulleidia extracta,Staphylococcus warneri[Bulleidia extracta,Streptococcus agalactiae[Bulleidia extracta,Streptococcus anginosus[Bulleidia extracta,Streptococcus australis[Bulleidia extracta,Streptococcus bovis[Bulleidia extracta,Streptococcus dysgalactiae[Bulleidia extracta,Streptococcus equinus[Bulleidia extracta,Streptococcus gordonii[Bulleidia extracta,Streptococcus infantarius[Bulleidia extracta,Streptococcus infantis[Bulleidia extracta,Streptococcus mitis[Bulleidia extracta,Streptococcus mutans[Bulleidia extracta,Streptococcus oralis[Bulleidia extracta,Streptococcus perfringens[Bulleidia extracta,Streptococcus peroris[Bulleidia extracta,Streptococcus pneumoniae[Bulleidia extracta,Streptococcus salivarius[Bulleidia extracta,Streptococcus sanguinis[Bulleidia extracta,Streptococcus thermophilus[Bulleidia extracta,Streptococcus vestibularis[Bulleidia extracta,Subdoligranulum variabile[Bulleidia extracta,Succinatimonas hippei[Bulleidia extracta,Sutterella wadsworthensis[Bulleidia extracta,Tropheryma whipplei[Bulleidia extracta,Veillonella atypica[Bulleidia extracta,Veillonella dispar[Bulleidia extracta,Veillonella parvula[Bulleidia extracta,Victivallis vadensis[Butyrivibrio crossotus,Butyrivibrio crossotus[Butyrivibrio crossotus,Campylobacter concisus[Butyrivibrio crossotus,Campylobacter curvus[Butyrivibrio crossotus,Campylobacter gracilis[Butyrivibrio crossotus,Campylobacter hominis[Butyrivibrio crossotus,Capnocytophaga ochracea[Butyrivibrio crossotus,Cardiobacterium hominis[Butyrivibrio crossotus,Catenibacterium mitsuokai[Butyrivibrio crossotus,Catonella morbi[Butyrivibrio crossotus,Citrobacter koseri[Butyrivibrio crossotus,Clostridium asparagiforme[Butyrivibrio crossotus,Clostridium bartlettii[Butyrivibrio crossotus,Clostridium botulinum[Butyrivibrio crossotus,Clostridium butyricum[Butyrivibrio crossotus,Clostridium difficile[Butyrivibrio crossotus,Clostridium disporicum[Butyrivibrio crossotus,Clostridium hathewayi[Butyrivibrio crossotus,Clostridium hylemonae[Butyrivibrio crossotus,Clostridium innocuum[Butyrivibrio crossotus,Clostridium leptum[Butyrivibrio crossotus,Clostridium mayombi[Butyrivibrio crossotus,Clostridium methylpentosum[Butyrivibrio crossotus,Clostridium nexile[Butyrivibrio crossotus,Clostridium orbiscindens[Butyrivibrio crossotus,Clostridium perfringens[Butyrivibrio crossotus,Clostridium saccharolyticum[Butyrivibrio crossotus,Clostridium scindens[Butyrivibrio crossotus,Clostridium symbiosum[Butyrivibrio crossotus,Clostridium tertium[Butyrivibrio crossotus,Collinsella aerofaciens[Butyrivibrio crossotus,Collinsella intestinalis[Butyrivibrio crossotus,Collinsella stercoris[Butyrivibrio crossotus,Coprobacillus sp. D7[Butyrivibrio crossotus,Coprococcus catus[Butyrivibrio crossotus,Coprococcus comes[Butyrivibrio crossotus,Coprococcus eutactus[Butyrivibrio crossotus,Corynebacterium aurimucosum[Butyrivibrio crossotus,Corynebacterium matruchotii[Butyrivibrio crossotus,Cryptobacterium curtum[Butyrivibrio crossotus,Desulfovibrio desulfuricans[Butyrivibrio crossotus,Desulfovibrio piger[Butyrivibrio crossotus,Dialister invisus[Butyrivibrio crossotus,Dialister microaerophilus[Butyrivibrio crossotus,Dorea formicigenerans[Butyrivibrio crossotus,Dorea longicatena[Butyrivibrio crossotus,Eggerthella lenta[Butyrivibrio crossotus,Eikenella corrodens[Butyrivibrio crossotus,Enterobacter cancerogenus[Butyrivibrio crossotus,Enterobacter cloacae[Butyrivibrio crossotus,Enterococcus faecalis[Butyrivibrio crossotus,Enterococcus faecium[Butyrivibrio crossotus,Enterococcus gallinarum[Butyrivibrio crossotus,Erysipelotrichaceae bacterium 3_1_53[Butyrivibrio crossotus,Escherichia coli[Butyrivibrio crossotus,Escherichia fergusonii[Butyrivibrio crossotus,Ethanoligenens harbinense[Butyrivibrio crossotus,Eubacterium cellulosolvens[Butyrivibrio crossotus,Eubacterium eligens[Butyrivibrio crossotus,Eubacterium hallii[Butyrivibrio crossotus,Eubacterium limosum[Butyrivibrio crossotus,Eubacterium rectale[Butyrivibrio crossotus,Eubacterium siraeum[Butyrivibrio crossotus,Eubacterium ventriosum[Butyrivibrio crossotus,Faecalibacterium prausnitzii[Butyrivibrio crossotus,Finegoldia magna[Butyrivibrio crossotus,Fusobacterium gonidiaformans[Butyrivibrio crossotus,Fusobacterium mortiferum[Butyrivibrio crossotus,Fusobacterium nucleatum[Butyrivibrio crossotus,Fusobacterium varium[Butyrivibrio crossotus,Gardnerella vaginalis[Butyrivibrio crossotus,Gemella haemolysans[Butyrivibrio crossotus,Gemella morbillorum[Butyrivibrio crossotus,Gordonibacter pamelaeae[Butyrivibrio crossotus,Granulicatella adiacens[Butyrivibrio crossotus,Granulicatella elegans[Butyrivibrio crossotus,Haemophilus influenzae[Butyrivibrio crossotus,Haemophilus parainfluenzae[Butyrivibrio crossotus,Helicobacter pullorum[Butyrivibrio crossotus,Helicobacter pylori[Butyrivibrio crossotus,Holdemania filiformis[Butyrivibrio crossotus,Kingella oralis[Butyrivibrio crossotus,Klebsiella pneumoniae[Butyrivibrio crossotus,Klebsiella varicola[Butyrivibrio crossotus,Lachnospiraceae bacterium 5_1_57FAA[Butyrivibrio crossotus,Lactobacillus acidophilus[Butyrivibrio crossotus,Lactobacillus amylovorus[Butyrivibrio crossotus,Lactobacillus brevis[Butyrivibrio crossotus,Lactobacillus casei[Butyrivibrio crossotus,Lactobacillus crispatus[Butyrivibrio crossotus,Lactobacillus delbrueckii[Butyrivibrio crossotus,Lactobacillus fermentum[Butyrivibrio crossotus,Lactobacillus gasseri[Butyrivibrio crossotus,Lactobacillus iners[Butyrivibrio crossotus,Lactobacillus johnsonii[Butyrivibrio crossotus,Lactobacillus paracasei[Butyrivibrio crossotus,Lactobacillus plantarum[Butyrivibrio crossotus,Lactobacillus reuteri[Butyrivibrio crossotus,Lactobacillus rhamnosus[Butyrivibrio crossotus,Lactobacillus ruminis[Butyrivibrio crossotus,Lactobacillus sakei[Butyrivibrio crossotus,Lactobacillus salivarius[Butyrivibrio crossotus,Lactococcus lactis[Butyrivibrio crossotus,Lautropia mirabilis[Butyrivibrio crossotus,Leuconostoc citreum[Butyrivibrio crossotus,Leuconostoc gasicomitatum[Butyrivibrio crossotus,Leuconostoc mesenteroides[Butyrivibrio crossotus,Listeria monocytogenes[Butyrivibrio crossotus,Marvinbryantia formatexigens[Butyrivibrio crossotus,Megamonas hypermegale[Butyrivibrio crossotus,Megasphaera micronuiformis[Butyrivibrio crossotus,Methanobrevibacter smithii[Butyrivibrio crossotus,Methanospaera stadtnanae[Butyrivibrio crossotus,Methylobacterium radiotolerans[Butyrivibrio crossotus,Mitsuokella multacidia[Butyrivibrio crossotus,Mobiluncus curtisii[Butyrivibrio crossotus,Mycoplasma hominis[Butyrivibrio crossotus,Neisseria mucosa[Butyrivibrio crossotus,Odoribacter splanchnicus[Butyrivibrio crossotus,Olsenella ulii[Butyrivibrio crossotus,Oribacterium sinus[Butyrivibrio crossotus,Oxalobacter formigenes[Butyrivibrio crossotus,Parabacteroides distasonis[Butyrivibrio crossotus,Parabacteroides johnsonii[Butyrivibrio crossotus,Parabacteroides merdae[Butyrivibrio crossotus,Parvimonas micra[Butyrivibrio crossotus,Pediococcus acidilactici[Butyrivibrio crossotus,Pediococcus pentosaceus[Butyrivibrio crossotus,Peptoniphilus duerdenii[Butyrivibrio crossotus,Peptoniphilus harei[Butyrivibrio crossotus,Peptoniphilus lacrimalis[Butyrivibrio crossotus,Peptostreptococcus anaerobius[Butyrivibrio crossotus,Peptostreptococcus stomatis[Butyrivibrio crossotus,Porphyromonas asaccharolytica[Butyrivibrio crossotus,Porphyromonas gasseri[Butyrivibrio crossotus,Prevotella amnii[Butyrivibrio crossotus,Prevotella bergensis[Butyrivibrio crossotus,Prevotella bivia[Butyrivibrio crossotus,Prevotella buccae[Butyrivibrio crossotus,Prevotella buccalis[Butyrivibrio crossotus,Prevotella copri[Butyrivibrio crossotus,Prevotella disiens[Butyrivibrio crossotus,Prevotella melaninogenica[Butyrivibrio crossotus,Prevotella multiformis[Butyrivibrio crossotus,Prevotella oralis[Butyrivibrio crossotus,Prevotella oris[Butyrivibrio crossotus,Prevotella salivae[Butyrivibrio crossotus,Prevotella timonensis[Butyrivibrio crossotus,Propionibacterium acnes[Butyrivibrio crossotus,Propionibacterium freudenreichii[Butyrivibrio crossotus,Proteus mirabilis[Butyrivibrio crossotus,Proteus penneri[Butyrivibrio crossotus,Pseudoflavonifractor capillosus[Butyrivibrio crossotus,Pseudomonas aeruginosa[Butyrivibrio crossotus,Pseudomonas fluorescens[Butyrivibrio crossotus,Pseudomonas putida[Butyrivibrio crossotus,Pseudoramibacter alactolyticus[Butyrivibrio crossotus,Pyramidobacter piscosoles[Butyrivibrio crossotus,Rhodopseudomonas palustris[Butyrivibrio crossotus,Roseburia intestinalis[Butyrivibrio crossotus,Roseburia inulinivorans[Butyrivibrio crossotus,Rothia dentocariosa[Butyrivibrio crossotus,Rothia mucilaginosa[Butyrivibrio crossotus,Ruminococcus albus[Butyrivibrio crossotus,Ruminococcus bromii[Butyrivibrio crossotus,Ruminococcus gnavus[Butyrivibrio crossotus,Ruminococcus lactaris[Butyrivibrio crossotus,Ruminococcus obeum[Butyrivibrio crossotus,Ruminococcus torques[Butyrivibrio crossotus,Selenomonas sputigena[Butyrivibrio crossotus,Shigella boydii[Butyrivibrio crossotus,Shigella dysenteriae[Butyrivibrio crossotus,Shigella sonnei[Butyrivibrio crossotus,Slackia exigua[Butyrivibrio crossotus,Solobacterium moorei[Butyrivibrio crossotus,Staphylococcus aureus[Butyrivibrio crossotus,Staphylococcus epidermidis[Butyrivibrio crossotus,Staphylococcus hominis[Butyrivibrio crossotus,Staphylococcus saprophyticus[Butyrivibrio crossotus,Staphylococcus warneri[Butyrivibrio crossotus,Streptococcus agalactiae[Butyrivibrio crossotus,Streptococcus anginosus[Butyrivibrio crossotus,Streptococcus australis[Butyrivibrio crossotus,Streptococcus bovis[Butyrivibrio crossotus,Streptococcus cristatus[Butyrivibrio crossotus,Streptococcus dysgalactiae[Butyrivibrio crossotus,Streptococcus equinus[Butyrivibrio crossotus,Streptococcus gordonii[Butyrivibrio crossotus,Streptococcus infantarius[Butyrivibrio crossotus,Streptococcus infantis[Butyrivibrio crossotus,Streptococcus mitis[Butyrivibrio crossotus,Streptococcus mutans[Butyrivibrio crossotus,Streptococcus oralis[Butyrivibrio crossotus,Streptococcus perfringens[Butyrivibrio crossotus,Streptococcus peroris[Butyrivibrio crossotus,Streptococcus pneumoniae[Butyrivibrio crossotus,Streptococcus salivarius[Butyrivibrio crossotus,Streptococcus sanguinis[Butyrivibrio crossotus,Streptococcus thermophilus[Butyrivibrio crossotus,Streptococcus vestibularis[Butyrivibrio crossotus,Subdoligranulum variabile[Butyrivibrio crossotus,Succinatimonas hippei[Butyrivibrio crossotus,Sutterella wadsworthensis[Butyrivibrio crossotus,Tropheryma whipplei[Butyrivibrio crossotus,Veillonella atypica[Butyrivibrio crossotus,Veillonella dispar[Butyrivibrio crossotus,Veillonella parvula[Butyrivibrio crossotus,Victivallis vadensis[Butyrivibrio crossotus,Campylobacter concisus[Butyrivibrio crossotus,Campylobacter curvus[Butyrivibrio crossotus,Campylobacter gracilis[Butyrivibrio crossotus,Campylobacter hominis[Butyrivibrio crossotus,Capnocytophaga ochracea[Butyrivibrio crossotus,Cardiobacterium hominis[Butyrivibrio crossotus,Catenibacterium mitsuokai[Butyrivibrio crossotus,Catonella morbi[Butyrivibrio crossotus,Citrobacter koseri[Butyrivibrio crossotus,Clostridium asparagiforme[Butyrivibrio crossotus,Clostridium bartlettii[Butyrivibrio crossotus,Clostridium botulinum[Butyrivibrio crossotus,Clostridium butyricum[Butyrivibrio crossotus,Clostridium difficile[Butyrivibrio crossotus,Clostridium disporicum[Butyrivibrio crossotus,Clostridium hathewayi[Butyrivibrio crossotus,Clostridium hylemonae[Butyrivibrio crossotus,Clostridium innocuum[Butyrivibrio crossotus,Clostridium leptum[Butyrivibrio crossotus,Clostridium mayombi[Butyrivibrio crossotus,Clostridium methylpentosum[Butyrivibrio crossotus,Clostridium nexile[Butyrivibrio crossotus,Clostridium orbiscindens[Butyrivibrio crossotus,Clostridium perfringens[Butyrivibrio crossotus,Clostridium symbiosum[Butyrivibrio crossotus,Clostridium tertium[Butyrivibrio crossotus,Collinsella aerofaciens[Butyrivibrio crossotus,Collinsella stercoris[Butyrivibrio crossotus,Coprobacillus sp. D7[Butyrivibrio crossotus,Coprococcus catus[Butyrivibrio crossotus,Coprococcus comes[Butyrivibrio crossotus,Coprococcus eutactus[Butyrivibrio crossotus,Corynebacterium aurimucosum[Butyrivibrio crossotus,Corynebacterium matruchotii[Butyrivibrio crossotus,Cryptobacterium curtum[Butyrivibrio crossotus,Desulfovibrio desulfuricans[Butyrivibrio crossotus,Desulfovibrio piger[Butyrivibrio crossotus,Dialister invisus[Butyrivibrio crossotus,Dialister microaerophilus[Butyrivibrio crossotus,Dorea formicigenerans[Butyrivibrio crossotus,Dorea longicatena[Butyrivibrio crossotus,Eggerthella lenta[Butyrivibrio crossotus,Eikenella corrodens[Butyrivibrio crossotus,Enterobacter cancerogenus[Butyrivibrio crossotus,Enterobacter cloacae[Butyrivibrio crossotus,Enterococcus faecalis[Butyrivibrio crossotus,Enterococcus faecium[Butyrivibrio crossotus,Enterococcus gallinarum[Butyrivibrio crossotus,Erysipelotrichaceae bacterium 3_1_53[Butyrivibrio crossotus,Escherichia coli[Butyrivibrio crossotus,Escherichia fergusonii[Butyrivibrio crossotus,Ethanoligenens harbinense[Butyrivibrio crossotus,Eubacterium cellulosolvens[Butyrivibrio crossotus,Eubacterium eligens[Butyrivibrio crossotus,Eubacterium hallii[Butyrivibrio crossotus,Eubacterium limosum[Butyrivibrio crossotus,Eubacterium rectale[Butyrivibrio crossotus,Eubacterium siraeum[Butyrivibrio crossotus,Eubacterium ventriosum[Butyrivibrio crossotus,Faecalibacterium prausnitzii[Butyrivibrio crossotus,Finegoldia magna[Butyrivibrio crossotus,Fusobacterium gonidiaformans[Butyrivibrio crossotus,Fusobacterium mortiferum[Butyrivibrio crossotus,Fusobacterium nucleatum[Butyrivibrio crossotus,Fusobacterium varium[Butyrivibrio crossotus,Gardnerella vaginalis[Butyrivibrio crossotus,Gemella

136

137

gonidiaformans/Capnocytophaga ochracea, Fusobacterium mortiferum/Capnocytophaga ochracea, Fusobacterium nucleatum/Capnocytophaga ochracea, Fusobacterium varium/Capnocytophaga ochracea, Gardnerella vaginalis/Capnocytophaga ochracea, Gemella haemolysans/Capnocytophaga ochracea, Gemella morbillorum/Capnocytophaga ochracea, Gordoniabacter pameleae/Capnocytophaga ochracea, Granulicatella adiacens/Capnocytophaga ochracea, Granulicatella elegans/Capnocytophaga ochracea, Haemophilus influenzae/Capnocytophaga ochracea, Haemophilus parainfluenzae/Capnocytophaga ochracea, Helicobacter pullorum/Capnocytophaga ochracea, Helicobacter pylori/Capnocytophaga ochracea, Holdemania filiformis/Capnocytophaga ochracea, Kingella oralis/Capnocytophaga ochracea, Klebsiella pneumoniae/Capnocytophaga ochracea, Klebsiella variicola/Capnocytophaga ochracea, Lachnospiraceae bacterium 5_1_57FAA/Capnocytophaga ochracea, Lactobacillus acidophilus/Capnocytophaga ochracea, Lactobacillus amylovorans/Capnocytophaga ochracea, Lactobacillus brevis/Capnocytophaga ochracea, Lactobacillus casei/Capnocytophaga ochracea, Lactobacillus crispatus/Capnocytophaga ochracea, Lactobacillus delbrueckii/Capnocytophaga ochracea, Lactobacillus fermentum/Capnocytophaga ochracea, Lactobacillus gasseri/Capnocytophaga ochracea, Lactobacillus iners/Capnocytophaga ochracea, Lactobacillus jensenii/Capnocytophaga ochracea, Lactobacillus johnsonii/Capnocytophaga ochracea, Lactobacillus paracasei/Capnocytophaga ochracea, Lactobacillus plantarum/Capnocytophaga ochracea, Lactobacillus reuteri/Capnocytophaga ochracea, Lactobacillus rhamnosus/Capnocytophaga ochracea, Lactobacillus ruminis/Capnocytophaga ochracea, Lactobacillus sakei/Capnocytophaga ochracea, Lactobacillus salivarius/Capnocytophaga ochracea, Lactococcus lactis/Capnocytophaga ochracea, Lautropia mirabilis/Capnocytophaga ochracea, Leuconostoc citreum/Capnocytophaga ochracea, Leuconostoc gasiconitum/Capnocytophaga ochracea, Leuconostoc mesenteroides/Capnocytophaga ochracea, Listeria monocytogenes/Capnocytophaga ochracea, Marvinbryantia formatexigens/Capnocytophaga ochracea, Megamonas hypermegale/Capnocytophaga ochracea, Megaspheera micronuciformis/Capnocytophaga ochracea, Methanobrevibacter smithii/Capnocytophaga ochracea, Methanospheera stadtmannae/Capnocytophaga ochracea, Methylobacterium radiotolerans/Capnocytophaga ochracea, Mitsuokella multacida/Capnocytophaga ochracea, Mobiluncus curtisii/Capnocytophaga ochracea, Mycoplasma hominis/Capnocytophaga ochracea, Neisseria mucosa/Capnocytophaga ochracea, Odoribacter splanchnicus/Capnocytophaga ochracea, Olsenella uli/Capnocytophaga ochracea, Oribacterium sinus/Capnocytophaga ochracea, Oxalobacter formigenes/Capnocytophaga ochracea, Parabacteroides distansoni/Capnocytophaga ochracea, Parabacteroides johnsonii/Capnocytophaga ochracea, Parabacteroides merdae/Capnocytophaga ochracea, Parvimonas micra/Capnocytophaga ochracea, Pediococcus acidilactici/Capnocytophaga ochracea, Pediococcus pentosaceus/Capnocytophaga ochracea, Peptoniphilus duerdenii/Capnocytophaga ochracea, Peptoniphilus harei/Capnocytophaga ochracea, Peptoniphilus lacrimalis/Capnocytophaga ochracea, Peptostreptococcus anaerobius/Capnocytophaga ochracea, Peptostreptococcus stomatis/Capnocytophaga ochracea, Porphyromonas asaccharolytica/Capnocytophaga ochracea, Porphyromonas uenonis/Capnocytophaga ochracea, Prevotella amnii/Capnocytophaga ochracea, Prevotella bergensis/Capnocytophaga ochracea, Prevotella bivia/Capnocytophaga ochracea, Prevotella buccae/Capnocytophaga ochracea, Prevotella buccalis/Capnocytophaga ochracea, Prevotella copri/Capnocytophaga ochracea, Prevotella disiens/Capnocytophaga ochracea, Prevotella melaninogenica/Capnocytophaga ochracea, Prevotella multifformis/Capnocytophaga ochracea, Prevotella oralis/Capnocytophaga ochracea, Prevotella oris/Capnocytophaga ochracea, Prevotella salivae/Capnocytophaga ochracea, Prevotella timonensis/Capnocytophaga ochracea, Propionibacterium acnes/Capnocytophaga ochracea, Propionibacterium freudenreichii/Capnocytophaga ochracea, Proteus mirabilis/Capnocytophaga ochracea, Proteus penneri/Capnocytophaga ochracea, Pseudoflavonifractor capillosus/Capnocytophaga ochracea, Pseudomonas aeruginosa/Capnocytophaga ochracea, Pseudomonas fluorescens/Capnocytophaga ochracea, Pseudomonas putida/Capnocytophaga ochracea, Pseudoramibacter alactolyticus/Capnocytophaga ochracea, Pyramidobacter piscicols/Capnocytophaga ochracea, Rhodopseudomonas palustris/Capnocytophaga ochracea, Roseburia intestinalis/Capnocytophaga ochracea, Roseburia inulinivorans/Capnocytophaga ochracea, Rothia dentocariosa/Capnocytophaga ochracea, Rothia mucilaginosa/Capnocytophaga ochracea, Ruminococcus albus/Capnocytophaga ochracea, Ruminococcus bromii/Capnocytophaga ochracea, Ruminococcus gnavus/Capnocytophaga ochracea, Ruminococcus lactaris/Capnocytophaga ochracea, Ruminococcus obeum/Capnocytophaga ochracea, Ruminococcus torques/Capnocytophaga ochracea, Selenomonas sputigena/Capnocytophaga ochracea, Shigella boydii/Capnocytophaga ochracea, Shigella dysenteriae/Capnocytophaga ochracea, Shigella sonnei/Capnocytophaga ochracea, Slackia exigua/Capnocytophaga ochracea, Solobacterium moorei/Capnocytophaga ochracea, Staphylococcus aureus/Capnocytophaga ochracea, Staphylococcus epidermidis/Capnocytophaga ochracea, Staphylococcus hominis/Capnocytophaga ochracea, Staphylococcus saprophyticus/Capnocytophaga ochracea, Staphylococcus warneri/Capnocytophaga ochracea, Streptococcus agalactiae/Capnocytophaga ochracea, Streptococcus anginosus/Capnocytophaga ochracea, Streptococcus australis/Capnocytophaga ochracea, Streptococcus bovis/Capnocytophaga ochracea, Streptococcus cristatus/Capnocytophaga ochracea, Streptococcus dysgalactiae/Capnocytophaga ochracea, Streptococcus equinus/Capnocytophaga ochracea, Streptococcus gordonii/Capnocytophaga ochracea, Streptococcus infantarius/Capnocytophaga ochracea, Streptococcus infantis/Capnocytophaga ochracea, Streptococcus mitis/Capnocytophaga ochracea, Streptococcus mutans/Capnocytophaga ochracea, Streptococcus oralis/Capnocytophaga ochracea, Streptococcus parasanguinis/Capnocytophaga ochracea, Streptococcus peroris/Capnocytophaga ochracea, Streptococcus pneumoniae/Capnocytophaga ochracea, Streptococcus salivarius/Capnocytophaga ochracea, Streptococcus sanguinis/Capnocytophaga ochracea, Streptococcus thermophilus/Capnocytophaga ochracea, Streptococcus vestibularis/Capnocytophaga ochracea, Subdoligranulum variable/Capnocytophaga ochracea, Succinatimonas hippei/Capnocytophaga ochracea, Sutterella wadsworthensis/Capnocytophaga ochracea, Tropheryma whippelii/Capnocytophaga ochracea, Veillonella atypica/Capnocytophaga ochracea, Veillonella dispar/Capnocytophaga ochracea, Veillonella parvula/Capnocytophaga ochracea, Victivallis vadensis/Capnocytophaga ochracea, Cardiobacterium hominis, Cardiobacterium mitsuokai, Cardiobacterium hominis, Catonella morbi/Cardiobacterium hominis, Citrobacter koseri/Cardiobacterium hominis, Clostridium asparagiforme/Cardiobacterium hominis, Clostridium bartlettii/Cardiobacterium hominis, Clostridium boltea/Cardiobacterium hominis, Clostridium botulinum/Cardiobacterium hominis, Clostridium butyricum/Cardiobacterium hominis, Clostridium difficile/Cardiobacterium hominis, Clostridium disporicum/Cardiobacterium hominis, Clostridium hathewayi/Cardiobacterium hominis, Clostridium hylemonae/Cardiobacterium hominis, Clostridium innocuum/Cardiobacterium hominis, Clostridium leptum/Cardiobacterium hominis, Clostridium mayombe/Cardiobacterium hominis, Clostridium methylpentosum/Cardiobacterium hominis, Clostridium nexile/Cardiobacterium hominis, Clostridium orbiscindens/Cardiobacterium hominis, Clostridium perfringens/Cardiobacterium hominis, Clostridium saccharolyticum/Cardiobacterium hominis, Clostridium scindens/Cardiobacterium hominis, Clostridium symbiosum/Cardiobacterium hominis, Clostridium tertium/Cardiobacterium hominis, Collinsella aerofaciens/Cardiobacterium hominis, Collinsella intestinalis/Cardiobacterium hominis, Collinsella stercoris/Cardiobacterium hominis, Coprobacillus sp. D7/Cardiobacterium hominis, Coprococcus catus/Cardiobacterium hominis, Coprococcus comes/Cardiobacterium hominis, Coprococcus eutactus/Cardiobacterium hominis, Corynebacterium aurimucosum/Cardiobacterium hominis, Corynebacterium matruchotii/Cardiobacterium hominis, Cryptobacterium curtum/Cardiobacterium hominis, Desulfovibrio desulfuricans/Cardiobacterium hominis, Desulfovibrio piger/Cardiobacterium hominis, Dialister invisus/Cardiobacterium hominis, Dialister microaerophilus/Cardiobacterium hominis, Dorea formicigenerans/Cardiobacterium hominis, Dorea longicatena/Cardiobacterium hominis, Eggerthella lenta/Cardiobacterium hominis, Eikenella corrodens/Cardiobacterium hominis, Enterobacter cancerogenus/Cardiobacterium hominis, Enterobacter cloacae/Cardiobacterium hominis, Enterococcus faecalis/Cardiobacterium hominis, Enterococcus faecium/Cardiobacterium hominis, Enterococcus gallinarum/Cardiobacterium hominis, Erysipelotrichaceae bacterium 3_1_53/Cardiobacterium hominis, Escherichia coli/Cardiobacterium hominis, Escherichia fergusonii/Cardiobacterium hominis, Ethanoligenens harense/Cardiobacterium hominis, Eubacterium cellulosolvens/Cardiobacterium hominis, Eubacterium eligens/Cardiobacterium hominis, Eubacterium hallii/Cardiobacterium hominis, Eubacterium limosum/Cardiobacterium hominis, Eubacterium rectale/Cardiobacterium hominis, Eubacterium siraeum/Cardiobacterium hominis, Eubacterium ventriosum/Cardiobacterium hominis, Faecalibacterium prausnitzii/Cardiobacterium hominis, Finegoldia magna/Cardiobacterium hominis, Fusobacterium gonidiaformans/Cardiobacterium hominis, Fusobacterium mortiferum/Cardiobacterium hominis, Fusobacterium nucleatum/Cardiobacterium hominis, Fusobacterium varium/Cardiobacterium hominis, Gardnerella vaginalis/Cardiobacterium hominis, Gemella haemolysans/Cardiobacterium hominis, Gemella morbillorum/Cardiobacterium hominis, Gordoniabacter pameleae/Cardiobacterium hominis, Granulicatella adiacens/Cardiobacterium hominis, Granulicatella elegans/Cardiobacterium hominis, Haemophilus influenzae/Cardiobacterium hominis, Haemophilus parainfluenzae/Cardiobacterium hominis, Helicobacter pullorum/Cardiobacterium hominis, Helicobacter pylori/Cardiobacterium hominis, Holdemania filiformis/Cardiobacterium hominis, Kingella oralis/Cardiobacterium hominis, Klebsiella pneumoniae/Cardiobacterium hominis, Klebsiella variicola/Cardiobacterium hominis, Lachnospiraceae bacterium 5_1_57FAA/Cardiobacterium hominis, Lactobacillus acidophilus/Cardiobacterium hominis, Lactobacillus amylovorans/Cardiobacterium hominis, Lactobacillus brevis/Cardiobacterium hominis, Lactobacillus casei/Cardiobacterium hominis, Lactobacillus crispatus/Cardiobacterium hominis, Lactobacillus delbrueckii/Cardiobacterium hominis, Lactobacillus fermentum/Cardiobacterium hominis, Lactobacillus gasseri/Cardiobacterium hominis, Lactobacillus iners/Cardiobacterium hominis, Lactobacillus jensenii/Cardiobacterium hominis, Lactobacillus johnsonii/Cardiobacterium hominis, Lactobacillus paracasei/Cardiobacterium hominis, Lactobacillus plantarum/Cardiobacterium hominis, Lactobacillus reuteri/Cardiobacterium hominis, Lactobacillus rhamnosus/Cardiobacterium hominis, Lactobacillus ruminis/Cardiobacterium hominis, Lactobacillus sakei/Cardiobacterium hominis, Lactobacillus salivarius/Cardiobacterium hominis, Lactococcus lactis/Cardiobacterium hominis, Lautropia mirabilis/Cardiobacterium hominis, Leuconostoc citreum/Cardiobacterium hominis, Leuconostoc gasiconitum/Cardiobacterium hominis, Leuconostoc mesenteroides/Cardiobacterium hominis, Listeria monocytogenes/Cardiobacterium hominis, Marvinbryantia formatexigens/Cardiobacterium hominis, Megamonas hypermegale/Cardiobacterium hominis, Megaspheera micronuciformis/Cardiobacterium hominis, Methanobrevibacter smithii/Cardiobacterium hominis, Methanospheera stadtmannae/Cardiobacterium hominis, Methylobacterium radiotolerans/Cardiobacterium hominis, Mitsuokella multacida/Cardiobacterium hominis, Mobiluncus curtisii/Cardiobacterium hominis, Mycoplasma hominis/Cardiobacterium hominis, Neisseria mucosa/Cardiobacterium hominis, Odoribacter splanchnicus/Cardiobacterium hominis, Olsenella uli/Cardiobacterium hominis, Oribacterium sinus/Cardiobacterium hominis, Oxalobacter formigenes/Cardiobacterium hominis, Parabacteroides distansoni/Cardiobacterium hominis, Parabacteroides johnsonii/Cardiobacterium hominis, Parabacteroides merdae/Cardiobacterium hominis, Parvimonas micra/Cardiobacterium hominis, Pediococcus acidilactici/Cardiobacterium hominis, Pediococcus pentosaceus/Cardiobacterium hominis, Peptoniphilus duerdenii/Cardiobacterium hominis, Peptoniphilus harei/Cardiobacterium hominis, Peptoniphilus lacrimalis/Cardiobacterium hominis, Peptostreptococcus anaerobius/Cardiobacterium hominis, Peptostreptococcus stomatis/Cardiobacterium hominis, Porphyromonas asaccharolytica/Cardiobacterium hominis, Porphyromonas uenonis/Cardiobacterium hominis, Prevotella amnii/Cardiobacterium hominis, Prevotella bergensis/Cardiobacterium hominis, Prevotella bivia/Cardiobacterium hominis, Prevotella buccae/Cardiobacterium hominis, Prevotella buccalis/Cardiobacterium hominis, Prevotella copri/Cardiobacterium hominis, Prevotella disiens/Cardiobacterium hominis, Prevotella melaninogenica/Cardiobacterium hominis, Prevotella multifformis/Cardiobacterium hominis, Prevotella oralis/Cardiobacterium hominis, Prevotella oris/Cardiobacterium hominis, Prevotella salivae/Cardiobacterium hominis, Prevotella timonensis/Cardiobacterium hominis, Propionibacterium acnes/Cardiobacterium hominis, Propionibacterium freudenreichii/Cardiobacterium hominis, Proteus mirabilis/Cardiobacterium hominis, Proteus penneri/Cardiobacterium hominis, Pseudoflavonifractor capillosus/Cardiobacterium hominis, Pseudomonas aeruginosa/Cardiobacterium hominis, Pseudomonas fluorescens/Cardiobacterium hominis, Pseudomonas putida/Cardiobacterium hominis, Pseudoramibacter alactolyticus/Cardiobacterium hominis, Pyramidobacter piscicols/Cardiobacterium hominis, Rhodopseudomonas palustris/Cardiobacterium hominis, Roseburia intestinalis/Cardiobacterium hominis, Roseburia inulinivorans/Cardiobacterium hominis, Rothia dentocariosa/Cardiobacterium hominis, Rothia mucilaginosa/Cardiobacterium hominis, Ruminococcus albus/Cardiobacterium hominis, Ruminococcus bromii/Cardiobacterium hominis, Ruminococcus gnavus/Cardiobacterium hominis, Ruminococcus lactaris/Cardiobacterium hominis, Ruminococcus obeum/Cardiobacterium hominis, Ruminococcus torques/Cardiobacterium hominis, Selenomonas sputigena/Cardiobacterium hominis, Shigella boydii/Cardiobacterium hominis, Shigella dysenteriae/Cardiobacterium hominis, Shigella sonnei/Cardiobacterium hominis, Slackia exigua/Cardiobacterium hominis, Solobacterium moorei/Cardiobacterium hominis, Staphylococcus aureus/Cardiobacterium hominis, Staphylococcus epidermidis/Cardiobacterium hominis, Staphylococcus hominis, Staphylococcus saprophyticus/Cardiobacterium hominis, Staphylococcus warneri/Cardiobacterium hominis, Streptococcus agalactiae/Cardiobacterium hominis, Streptococcus anginosus/Cardiobacterium hominis, Streptococcus australis/Cardiobacterium hominis, Streptococcus bovis/Cardiobacterium hominis, Streptococcus cristatus/Cardiobacterium hominis, Streptococcus dysgalactiae/Cardiobacterium hominis, Streptococcus equinus/Cardiobacterium hominis, Streptococcus gordonii/Cardiobacterium hominis, Streptococcus infantarius/Cardiobacterium hominis, Streptococcus infantis/Cardiobacterium hominis, Streptococcus mitis/Cardiobacterium hominis, Streptococcus mutans/Cardiobacterium hominis, Streptococcus oralis/Cardiobacterium hominis, Streptococcus parasanguinis/Cardiobacterium hominis, Streptococcus peroris/Cardiobacterium hominis, Streptococcus pneumoniae/Cardiobacterium hominis, Streptococcus salivarius/Cardiobacterium hominis, Streptococcus sanguinis/Cardiobacterium hominis, Streptococcus thermophilus/Cardiobacterium hominis, Streptococcus vestibularis/Cardiobacterium hominis, Subdoligranulum variable/Cardiobacterium hominis, Succinatimonas hippei/Cardiobacterium hominis, Sutterella wadsworthensis/Cardiobacterium hominis, Tropheryma whippelii/Cardiobacterium hominis, Veillonella atypica/Cardiobacterium hominis, Veillonella dispar/Cardiobacterium hominis, Veillonella parvula/Cardiobacterium hominis, Victivallis vadensis/Catenibacterium mitsuokai, Catenibacterium mitsuokai, Catenibacterium mitsuokai, Catonella morbi/Catenibacterium mitsuokai, Citrobacter koseri/Catenibacterium mitsuokai, Clostridium asparagiforme/Catenibacterium mitsuokai, Clostridium bartlettii/Catenibacterium mitsuokai, Clostridium boltea/Catenibacterium mitsuokai, Clostridium botulinum/Catenibacterium mitsuokai, Clostridium butyricum/Catenibacterium mitsuokai, Clostridium difficile/Catenibacterium mitsuokai, Clostridium disporicum/Catenibacterium mitsuokai, Clostridium hathewayi/Catenibacterium mitsuokai, Clostridium hylemonae/Catenibacterium mitsuokai, Clostridium innocuum/Catenibacterium mitsuokai, Clostridium leptum/Catenibacterium mitsuokai, Clostridium mayombe/Catenibacterium mitsuokai, Clostridium methylpentosum/Catenibacterium mitsuokai, Clostridium nexile/Catenibacterium mitsuokai, Clostridium orbiscindens/Catenibacterium mitsuokai, Clostridium perfringens/Catenibacterium mitsuokai, Clostridium saccharolyticum/Catenibacterium mitsuokai, Clostridium scindens/Catenibacterium mitsuokai, Clostridium symbiosum/Catenibacterium mitsuokai, Clostridium tertium/Catenibacterium mitsuokai, Collinsella aerofaciens/Catenibacterium mitsuokai, Collinsella intestinalis/Catenibacterium mitsuokai, Collinsella stercoris/Catenibacterium mitsuokai, Coprobacillus sp. D7/Catenibacterium mitsuokai, Coprococcus catus/Catenibacterium mitsuokai, Coprococcus comes/Catenibacterium mitsuokai, Coprococcus eutactus/Catenibacterium mitsuokai, Corynebacterium aurimucosum/Catenibacterium mitsuokai, Corynebacterium matruchotii/Catenibacterium mitsuokai, Cryptobacterium curtum/Catenibacterium mitsuokai, Desulfovibrio desulfuricans/Catenibacterium mitsuokai, Desulfovibrio piger/Catenibacterium mitsuokai, Dialister invisus/Catenibacterium mitsuokai, Dialister microaerophilus/Catenibacterium mitsuokai, Dorea formicigenerans/Catenibacterium mitsuokai, Dorea longicatena/Catenibacterium mitsuokai, Eggerthella lenta/Catenibacterium mitsuokai, Eikenella corrodens/Catenibacterium mitsuokai, Enterobacter cancerogenus/Catenibacterium mitsuokai, Enterobacter cloacae/Catenibacterium mitsuokai, Enterococcus faecalis/Catenibacterium mitsuokai, Enterococcus faecium/Catenibacterium mitsuokai, Enterococcus

gallinarum|Catenibacterium mitsuokai,Erysipelotrichaceae bacterium 3_1_53|Catenibacterium mitsuokai,Escherichia coli|Catenibacterium mitsuokai,Escherichia fergusonii|Catenibacterium mitsuokai,Ethanoligenes harbinense|Catenibacterium mitsuokai,Eubacterium cellulosolvens|Catenibacterium mitsuokai,Eubacterium eligens|Catenibacterium mitsuokai,Eubacterium hallii|Catenibacterium mitsuokai,Eubacterium limosum|Catenibacterium mitsuokai,Eubacterium rectale|Catenibacterium mitsuokai,Eubacterium siraeum|Catenibacterium mitsuokai,Eubacterium ventriosum|Catenibacterium mitsuokai,Faecalibacterium prausnitzii|Catenibacterium mitsuokai,Finegoldia magna|Catenibacterium mitsuokai,Fusobacterium goniaiformans|Catenibacterium mitsuokai,Fusobacterium mortiferum|Catenibacterium mitsuokai,Fusobacterium nucleatum|Catenibacterium mitsuokai,Fusobacterium varium|Catenibacterium mitsuokai,Gardnerella vaginalis|Catenibacterium mitsuokai,Gemella haemolysans|Catenibacterium mitsuokai,Gemella morbillorum|Catenibacterium mitsuokai,Gordonibacter pamelaeae|Catenibacterium mitsuokai,Granulicatella adiacens|Catenibacterium mitsuokai,Granulicatella elegans|Catenibacterium mitsuokai,Haemophilus influenzae|Catenibacterium mitsuokai,Haemophilus parainfluenzae|Catenibacterium mitsuokai,Helicobacter pullorum|Catenibacterium mitsuokai,Helicobacter pylori|Catenibacterium mitsuokai,Holdemania filiformis|Catenibacterium mitsuokai,Kingella oralis|Catenibacterium mitsuokai,Klebsiella pneumoniae|Catenibacterium mitsuokai,Klebsiella varicola|Catenibacterium mitsuokai,Lachnospiraceae bacterium 5_1_57FAA|Catenibacterium mitsuokai,Lactobacillus acidophilus|Catenibacterium mitsuokai,Lactobacillus amylovorus|Catenibacterium mitsuokai,Lactobacillus brevis|Catenibacterium mitsuokai,Lactobacillus casei|Catenibacterium mitsuokai,Lactobacillus crispatus|Catenibacterium mitsuokai,Lactobacillus delbrueckii|Catenibacterium mitsuokai,Lactobacillus fermentum|Catenibacterium mitsuokai,Lactobacillus gasseri|Catenibacterium mitsuokai,Lactobacillus iners|Catenibacterium mitsuokai,Lactobacillus jensenii|Catenibacterium mitsuokai,Lactobacillus johnsonii|Catenibacterium mitsuokai,Lactobacillus paracasei|Catenibacterium mitsuokai,Lactobacillus plantarum|Catenibacterium mitsuokai,Lactobacillus reuteri|Catenibacterium mitsuokai,Lactobacillus rhamnosus|Catenibacterium mitsuokai,Lactobacillus ruminis|Catenibacterium mitsuokai,Lactobacillus sakei|Catenibacterium mitsuokai,Lactobacillus salivarius|Catenibacterium mitsuokai,Lactococcus lactis|Catenibacterium mitsuokai,Lautropia mirabilis|Catenibacterium mitsuokai,Leuconostoc citreum|Catenibacterium mitsuokai,Leuconostoc gasiconitum|Catenibacterium mitsuokai,Leuconostoc mesenteroides|Catenibacterium mitsuokai,Listeria monocytogenes|Catenibacterium mitsuokai,Martiniibryantia formatexigens|Catenibacterium mitsuokai,Megamonas hypernegale|Catenibacterium mitsuokai,Megasphaera micronuciformis|Catenibacterium mitsuokai,Methanobrevibacter smithii|Catenibacterium mitsuokai,Methanospaera stadmanae|Catenibacterium mitsuokai,Methylobacterium radiotolerans|Catenibacterium mitsuokai,Mitsukella multacida|Catenibacterium mitsuokai,Mobiluncus curtisii|Catenibacterium mitsuokai,Mycoplasma hominis|Catenibacterium mitsuokai,Neisseria mucosa|Catenibacterium mitsuokai,Odoribacter splanchnicus|Catenibacterium mitsuokai,Olsenella uli|Catenibacterium mitsuokai,Oribacterium sinus|Catenibacterium mitsuokai,Oxalobacter formigenes|Catenibacterium mitsuokai,Parabacteroides distasonis|Catenibacterium mitsuokai,Parabacteroides johnsonii|Catenibacterium mitsuokai,Parabacteroides merdae|Catenibacterium mitsuokai,Parvimonas micra|Catenibacterium mitsuokai,Peptonococcus acidilactici|Catenibacterium mitsuokai,Pediococcus pentosaceus|Catenibacterium mitsuokai,Peptoniphilus duerdenii|Catenibacterium mitsuokai,Peptoniphilus harei|Catenibacterium mitsuokai,Peptoniphilus lacrimalis|Catenibacterium mitsuokai,Peptostreptococcus anaerobius|Catenibacterium mitsuokai,Peptostreptococcus stomatis|Catenibacterium mitsuokai,Porphyromonas asaccharolytica|Catenibacterium mitsuokai,Porphyromonas uenonis|Catenibacterium mitsuokai,Prevotella amnii|Catenibacterium mitsuokai,Prevotella bergensis|Catenibacterium mitsuokai,Prevotella bivia|Catenibacterium mitsuokai,Prevotella buccae|Catenibacterium mitsuokai,Prevotella buccalis|Catenibacterium mitsuokai,Prevotella copri|Catenibacterium mitsuokai,Prevotella disiens|Catenibacterium mitsuokai,Prevotella melaninogenica|Catenibacterium mitsuokai,Prevotella multiformis|Catenibacterium mitsuokai,Prevotella oralis|Catenibacterium mitsuokai,Prevotella oris|Catenibacterium mitsuokai,Prevotella salivae|Catenibacterium mitsuokai,Prevotella timonensis|Catenibacterium mitsuokai,Propionibacterium acnes|Catenibacterium mitsuokai,Propionibacterium freudenreichii|Catenibacterium mitsuokai,Proteus mirabilis|Catenibacterium mitsuokai,Proteus penneri|Catenibacterium mitsuokai,Pseudoflavonifractor capillosus|Catenibacterium mitsuokai,Pseudomonas aeruginosa|Catenibacterium mitsuokai,Pseudomonas fluorescens|Catenibacterium mitsuokai,Pseudomonas putida|Catenibacterium mitsuokai,Pseudorambacter alactolyticus|Catenibacterium mitsuokai,Pyramidobacter piscicola|Catenibacterium mitsuokai,Rhodospseudomonas palustris|Catenibacterium mitsuokai,Roseburia intestinalis|Catenibacterium mitsuokai,Roseburia inulinivorans|Catenibacterium mitsuokai,Rothia dentocariosa|Catenibacterium mitsuokai,Rothia mucilaginosa|Catenibacterium mitsuokai,Ruminococcus albus|Catenibacterium mitsuokai,Ruminococcus bromii|Catenibacterium mitsuokai,Ruminococcus lactaris|Catenibacterium mitsuokai,Ruminococcus obseum|Catenibacterium mitsuokai,Ruminococcus torques|Catenibacterium mitsuokai,Selenomonas sputigena|Catenibacterium mitsuokai,Shigella boydii|Catenibacterium mitsuokai,Shigella dysenteriae|Catenibacterium mitsuokai,Shigella sonnei|Catenibacterium mitsuokai,Slackia exigua|Catenibacterium mitsuokai,Solobacterium moorei|Catenibacterium mitsuokai,Staphylococcus aureus|Catenibacterium mitsuokai,Staphylococcus epidermidis|Catenibacterium mitsuokai,Staphylococcus hominis|Catenibacterium mitsuokai,Staphylococcus saprophyticus|Catenibacterium mitsuokai,Staphylococcus warneri|Catenibacterium mitsuokai,Streptococcus agalactiae|Catenibacterium mitsuokai,Streptococcus anginosus|Catenibacterium mitsuokai,Streptococcus australis|Catenibacterium mitsuokai,Streptococcus bovis|Catenibacterium mitsuokai,Streptococcus cristatus|Catenibacterium mitsuokai,Streptococcus dysgalactiae|Catenibacterium mitsuokai,Streptococcus equinus|Catenibacterium mitsuokai,Streptococcus gordonii|Catenibacterium mitsuokai,Streptococcus mutans|Catenibacterium mitsuokai,Streptococcus infantarius|Catenibacterium mitsuokai,Streptococcus infantis|Catenibacterium mitsuokai,Streptococcus mitis|Catenibacterium mitsuokai,Streptococcus mutans|Catenibacterium mitsuokai,Streptococcus oralis|Catenibacterium mitsuokai,Streptococcus parasanguinis|Catenibacterium mitsuokai,Streptococcus peroris|Catenibacterium mitsuokai,Streptococcus pneumoniae|Catenibacterium mitsuokai,Streptococcus salivarius|Catenibacterium mitsuokai,Streptococcus sanguinis|Catenibacterium mitsuokai,Streptococcus thermophilus|Catenibacterium mitsuokai,Streptococcus vestibularis|Catenibacterium mitsuokai,Subdoligranulum variabile|Catenibacterium mitsuokai,Succinatimonas hippei|Catenibacterium mitsuokai,Sutterella wadsworthensis|Catenibacterium mitsuokai,Tropheryma whippelii|Catenibacterium mitsuokai,Veillonella atypica|Catenibacterium mitsuokai,Veillonella dispar|Catenibacterium mitsuokai,Veillonella parvula|Catenibacterium mitsuokai,Victivallis vadensis|Catonella morbi,Citrobacter koseri|Catonella morbi,Clostridium asparagiforme|Catonella morbi,Clostridium bartlettii|Catonella morbi,Clostridium boltae|Catonella morbi,Clostridium botulinum|Catonella morbi,Clostridium butyricum|Catonella morbi,Clostridium difficile|Catonella morbi,Clostridium disporium|Catonella morbi,Clostridium hathewayi|Catonella morbi,Clostridium hylemonae|Catonella morbi,Clostridium innocuum|Catonella morbi,Clostridium leptum|Catonella morbi,Clostridium mayombeii|Catonella morbi,Clostridium methylpentosum|Catonella morbi,Clostridium nexile|Catonella morbi,Clostridium perfringens|Catonella morbi,Clostridium saccharolyticum|Catonella morbi,Clostridium scindens|Catonella morbi,Clostridium symbiosum|Catonella morbi,Clostridium tertium|Catonella morbi,Clostridium thermophilum|Catonella morbi,Collinsella intestinalis|Catonella morbi,Collinsella stercoris|Catonella morbi,Coprococcus catus|Catonella morbi,Coprococcus faecalis|Catonella morbi,Coprococcus eutactus|Catonella morbi,Corynebacterium aurimucosum|Catonella morbi,Corynebacterium matruchoitii|Catonella morbi,Cryptobacterium curtum|Catonella morbi,Desulfovibrio desulfuricans|Catonella morbi,Desulfovibrio piger|Catonella morbi,Dialister invisus|Catonella morbi,Dialister microaerophilus|Catonella morbi,Dorea formicigenerans|Catonella morbi,Dorea longicatena|Catonella morbi,Eggerthella lenta|Catonella morbi,Eikenella corrodens|Catonella morbi,Enterobacter cancerogenus|Catonella morbi,Enterobacter cloacae|Catonella morbi,Enterococcus faecalis|Catonella morbi,Enterococcus faecium|Catonella morbi,Enterococcus gallinarum|Catonella morbi,Erysipelotrichaceae bacterium 3_1_53|Catonella morbi,Escherichia coli|Catonella morbi,Escherichia fergusonii|Catonella morbi,Ethanoligenes harbinense|Catonella morbi,Eubacterium cellulosolvens|Catonella morbi,Eubacterium eligens|Catonella morbi,Eubacterium hallii|Catonella morbi,Eubacterium limosum|Catonella morbi,Eubacterium rectale|Catonella morbi,Eubacterium siraeum|Catonella morbi,Eubacterium ventriosum|Catonella morbi,Faecalibacterium prausnitzii|Catonella morbi,Finegoldia magna|Catonella morbi,Fusobacterium goniaiformans|Catonella morbi,Fusobacterium mortiferum|Catonella morbi,Fusobacterium nucleatum|Catonella morbi,Fusobacterium varium|Catonella morbi,Gardnerella vaginalis|Catonella morbi,Gemella haemolysans|Catonella morbi,Gemella morbillorum|Catonella morbi,Gordonibacter pamelaeae|Catonella morbi,Granulicatella adiacens|Catonella morbi,Granulicatella elegans|Catonella morbi,Haemophilus influenzae|Catonella morbi,Haemophilus parainfluenzae|Catonella morbi,Helicobacter pullorum|Catonella morbi,Helicobacter pylori|Catonella morbi,Holdemania filiformis|Catonella morbi,Kingella oralis|Catonella morbi,Klebsiella pneumoniae|Catonella morbi,Klebsiella varicola|Catonella morbi,Lachnospiraceae bacterium 5_1_57FAA|Catonella morbi,Lactobacillus acidophilus|Catonella morbi,Lactobacillus amylovorus|Catonella morbi,Lactobacillus brevis|Catonella morbi,Lactobacillus casei|Catonella morbi,Lactobacillus crispatus|Catonella morbi,Lactobacillus delbrueckii|Catonella morbi,Lactobacillus fermentum|Catonella morbi,Lactobacillus gasseri|Catonella morbi,Lactobacillus iners|Catonella morbi,Lactobacillus jensenii|Catonella morbi,Lactobacillus johnsonii|Catonella morbi,Lactobacillus paracasei|Catonella morbi,Lactobacillus plantarum|Catonella morbi,Lactobacillus reuteri|Catonella morbi,Lactobacillus rhamnosus|Catonella morbi,Lactobacillus ruminis|Catonella morbi,Lactobacillus sakei|Catonella morbi,Lactobacillus salivarius|Catonella morbi,Lactococcus lactis|Catonella morbi,Lautropia mirabilis|Catonella morbi,Leuconostoc citreum|Catonella morbi,Leuconostoc gasiconitum|Catonella morbi,Leuconostoc mesenteroides|Catonella morbi,Listeria monocytogenes|Catonella morbi,Martiniibryantia formatexigens|Catonella morbi,Megamonas hypernegale|Catonella morbi,Megasphaera micronuciformis|Catonella morbi,Methanobrevibacter smithii|Catonella morbi,Methanospaera stadmanae|Catonella morbi,Methylobacterium radiotolerans|Catonella morbi,Mitsukella multacida|Catonella morbi,Mobiluncus curtisii|Catonella morbi,Mycoplasma hominis|Catonella morbi,Neisseria mucosa|Catonella morbi,Odoribacter splanchnicus|Catonella morbi,Olsenella uli|Catonella morbi,Oribacterium sinus|Catonella morbi,Oxalobacter formigenes|Catonella morbi,Parabacteroides distasonis|Catonella morbi,Parabacteroides merdae|Catonella morbi,Parvimonas micra|Catonella morbi,Pediococcus acidilactici|Catonella morbi,Pediococcus pentosaceus|Catonella morbi,Peptoniphilus duerdenii|Catonella morbi,Peptoniphilus harei|Catonella morbi,Peptoniphilus lacrimalis|Catonella morbi,Peptostreptococcus anaerobius|Catonella morbi,Peptostreptococcus stomatis|Catonella morbi,Porphyromonas asaccharolytica|Catonella morbi,Porphyromonas uenonis|Catonella morbi,Prevotella amnii|Catonella morbi,Prevotella bergensis|Catonella morbi,Prevotella bivia|Catonella morbi,Prevotella buccae|Catonella morbi,Prevotella buccalis|Catonella morbi,Prevotella copri|Catonella morbi,Prevotella disiens|Catonella morbi,Prevotella melaninogenica|Catonella morbi,Prevotella multiformis|Catonella morbi,Prevotella oralis|Catonella morbi,Prevotella oris|Catonella morbi,Prevotella salivae|Catonella morbi,Prevotella timonensis|Catonella morbi,Propionibacterium acnes|Catonella morbi,Propionibacterium freudenreichii|Catonella morbi,Proteus mirabilis|Catonella morbi,Proteus penneri|Catonella morbi,Pseudoflavonifractor capillosus|Catonella morbi,Pseudomonas aeruginosa|Catonella morbi,Pseudomonas fluorescens|Catonella morbi,Pseudomonas putida|Catonella morbi,Pseudorambacter alactolyticus|Catonella morbi,Pyramidobacter piscicola|Catonella morbi,Rhodospseudomonas palustris|Catonella morbi,Roseburia intestinalis|Catonella morbi,Roseburia inulinivorans|Catonella morbi,Rothia dentocariosa|Catonella morbi,Rothia mucilaginosa|Catonella morbi,Ruminococcus albus|Catonella morbi,Ruminococcus bromii|Catonella morbi,Ruminococcus gnavus|Catonella morbi,Ruminococcus lactaris|Catonella morbi,Ruminococcus obseum|Catonella morbi,Ruminococcus torques|Catonella morbi,Selenomonas sputigena|Catonella morbi,Shigella boydii|Catonella morbi,Shigella dysenteriae|Catonella morbi,Shigella sonnei|Catonella morbi,Slackia exigua|Catonella morbi,Solobacterium moorei|Catonella morbi,Staphylococcus aureus|Catonella morbi,Staphylococcus epidermidis|Catonella morbi,Staphylococcus hominis|Catonella morbi,Staphylococcus saprophyticus|Catonella morbi,Staphylococcus warneri|Catonella morbi,Streptococcus agalactiae|Catonella morbi,Streptococcus anginosus|Catonella morbi,Streptococcus australis|Catonella morbi,Streptococcus bovis|Catonella morbi,Streptococcus cristatus|Catonella morbi,Streptococcus dysgalactiae|Catonella morbi,Streptococcus equinus|Catonella morbi,Streptococcus gordonii|Catonella morbi,Streptococcus infantarius|Catonella morbi,Streptococcus infantis|Catonella morbi,Streptococcus mitis|Catonella morbi,Streptococcus mutans|Catonella morbi,Streptococcus oralis|Catonella morbi,Streptococcus parasanguinis|Catonella morbi,Streptococcus peroris|Catonella morbi,Streptococcus pneumoniae|Catonella morbi,Streptococcus salivarius|Catonella morbi,Streptococcus sanguinis|Catonella morbi,Streptococcus thermophilus|Catonella morbi,Streptococcus vestibularis|Catonella morbi,Subdoligranulum variabile|Catonella morbi,Succinatimonas hippei|Catonella morbi,Sutterella wadsworthensis|Catonella morbi,Tropheryma whippelii|Catonella morbi,Veillonella atypica|Catonella morbi,Veillonella dispar|Catonella morbi,Veillonella parvula|Catonella morbi,Victivallis vadensis|Citrobacter koseri,Citrobacter koseri,Citrobacter koseri,Clostridium asparagiforme|Citrobacter koseri,Clostridium bartlettii|Citrobacter koseri,Clostridium boltae|Citrobacter koseri,Clostridium botulinum|Citrobacter koseri,Clostridium butyricum|Citrobacter koseri,Clostridium difficile|Citrobacter koseri,Clostridium disporium|Citrobacter koseri,Clostridium hathewayi|Citrobacter koseri,Clostridium hylemonae|Citrobacter koseri,Clostridium innocuum|Citrobacter koseri,Clostridium leptum|Citrobacter koseri,Clostridium mayombeii|Citrobacter koseri,Clostridium methylpentosum|Citrobacter koseri,Clostridium nexile|Citrobacter koseri,Clostridium perfringens|Citrobacter koseri,Clostridium saccharolyticum|Citrobacter koseri,Clostridium scindens|Citrobacter koseri,Clostridium symbiosum|Citrobacter koseri,Clostridium tertium|Citrobacter koseri,Collinsella aerofaciens|Citrobacter koseri,Collinsella intestinalis|Citrobacter koseri,Collinsella stercoris|Citrobacter koseri,Coprococcus catus|Citrobacter koseri,Coprococcus faecalis|Citrobacter koseri,Coprococcus eutactus|Citrobacter koseri,Corynebacterium aurimucosum|Citrobacter koseri,Corynebacterium matruchoitii|Citrobacter koseri,Cryptobacterium curtum|Citrobacter koseri,Desulfovibrio desulfuricans|Citrobacter koseri,Desulfovibrio piger|Citrobacter koseri,Dialister invisus|Citrobacter koseri,Dialister microaerophilus|Citrobacter koseri,Dorea formicigenerans|Citrobacter koseri,Dorea longicatena|Citrobacter koseri,Eggerthella lenta|Citrobacter koseri,Eikenella corrodens|Citrobacter koseri,Enterobacter cancerogenus|Citrobacter koseri,Enterobacter cloacae|Citrobacter koseri,Enterococcus faecalis|Citrobacter koseri,Enterococcus faecium|Citrobacter koseri,Enterococcus gallinarum|Citrobacter koseri,Erysipelotrichaceae bacterium 3_1_53|Citrobacter koseri,Escherichia coli|Citrobacter koseri,Escherichia fergusonii|Citrobacter koseri,Ethanoligenes harbinense|Citrobacter koseri,Eubacterium cellulosolvens|Citrobacter koseri,Eubacterium eligens|Citrobacter koseri,Eubacterium hallii|Citrobacter koseri,Eubacterium limosum|Citrobacter koseri,Eubacterium rectale|Citrobacter koseri,Eubacterium siraeum|Citrobacter koseri,Eubacterium ventriosum|Citrobacter koseri,Faecalibacterium prausnitzii|Citrobacter koseri,Finegoldia magna|Citrobacter koseri,Fusobacterium goniaiformans|Citrobacter koseri,Fusobacterium mortiferum|Citrobacter koseri,Fusobacterium nucleatum|Citrobacter koseri,Fusobacterium varium|Citrobacter koseri,Gardnerella vaginalis|Citrobacter koseri,Gemella haemolysans|Citrobacter koseri,Gemella morbillorum|Citrobacter koseri,Gordonibacter pamelaeae|Citrobacter koseri,Granulicatella adiacens|Citrobacter koseri,Granulicatella elegans|Citrobacter koseri,Haemophilus influenzae|Citrobacter koseri,Haemophilus parainfluenzae|Citrobacter koseri,Helicobacter pullorum|Citrobacter koseri,Helicobacter pylori|Citrobacter koseri,Holdemania filiformis|Citrobacter koseri,Kingella oralis|Citrobacter koseri,Klebsiella pneumoniae|Citrobacter koseri,Klebsiella varicola|Citrobacter koseri,Lachnospiraceae bacterium 5_1_57FAA|Citrobacter koseri,Lactobacillus acidophilus|Citrobacter koseri,Lactobacillus amylovorus|Citrobacter koseri,Lactobacillus brevis|Citrobacter koseri,Lactobacillus casei|Citrobacter koseri,Lactobacillus crispatus|Citrobacter koseri,Lactobacillus delbrueckii|Citrobacter koseri,Lactobacillus fermentum|Citrobacter koseri,Lactobacillus gasseri|Citrobacter koseri,Lactobacillus iners|Citrobacter koseri,Lactobacillus jensenii|Citrobacter

140

141

botulinum, *Pseudomonas putida*[Clostridium botulinum, *Pseudoramibacter alactolyticus*[Clostridium botulinum, *Pyramidobacter piscolens*[Clostridium botulinum, *Rhodopseudomonas palustris*[Clostridium botulinum, *Roseburia intestinalis*[Clostridium botulinum, *Roseburia inulinivorans*[Clostridium botulinum, *Rothia dentocariosa*[Clostridium botulinum, *Rothia mucilaginosa*[Clostridium botulinum, *Ruminococcus albus*[Clostridium botulinum, *Ruminococcus bromii*[Clostridium botulinum, *Ruminococcus gnavus*[Clostridium botulinum, *Ruminococcus lactaris*[Clostridium botulinum, *Ruminococcus obeum*[Clostridium botulinum, *Ruminococcus torques*[Clostridium botulinum, *Selenomonas sputigena*[Clostridium botulinum, *Shigella boydii*[Clostridium botulinum, *Shigella dysenteriae*[Clostridium botulinum, *Shigella sonnei*[Clostridium botulinum, *Slackia exigua*[Clostridium botulinum, *Solobacterium moorei*[Clostridium botulinum, *Staphylococcus aureus*[Clostridium botulinum, *Staphylococcus epidermidis*[Clostridium botulinum, *Staphylococcus hominis*[Clostridium botulinum, *Staphylococcus saprophyticus*[Clostridium botulinum, *Staphylococcus warneri*[Clostridium botulinum, *Streptococcus agalactiae*[Clostridium botulinum, *Streptococcus anginosus*[Clostridium botulinum, *Streptococcus australis*[Clostridium botulinum, *Streptococcus bovis*[Clostridium botulinum, *Streptococcus cristatus*[Clostridium botulinum, *Streptococcus dysgalactiae*[Clostridium botulinum, *Streptococcus equinus*[Clostridium botulinum, *Streptococcus gordonii*[Clostridium botulinum, *Streptococcus infantarius*[Clostridium botulinum, *Streptococcus infantis*[Clostridium botulinum, *Streptococcus mitis*[Clostridium botulinum, *Streptococcus mutans*[Clostridium botulinum, *Streptococcus oralis*[Clostridium botulinum, *Streptococcus parasanguinis*[Clostridium botulinum, *Streptococcus peroris*[Clostridium botulinum, *Streptococcus pneumoniae*[Clostridium botulinum, *Streptococcus salivarius*[Clostridium botulinum, *Streptococcus sanguinis*[Clostridium botulinum, *Streptococcus thermophilus*[Clostridium botulinum, *Streptococcus vestibularis*[Clostridium botulinum, *Subdoligranulum variable*[Clostridium botulinum, *Succinatimonas hippei*[Clostridium botulinum, *Sutterella wadsworthensis*[Clostridium botulinum, *Tropheryma whippelii*[Clostridium botulinum, *Veillonella atypica*[Clostridium botulinum, *Veillonella dispar*[Clostridium botulinum, *Veillonella parvula*[Clostridium botulinum, *Victivallis vadensis*[Clostridium butyricum, *Clostridium butyricum*[Clostridium butyricum, *Clostridium difficile*[Clostridium butyricum, *Clostridium disporicum*[Clostridium butyricum, *Clostridium hathewayi*[Clostridium butyricum, *Clostridium hylemonae*[Clostridium butyricum, *Clostridium innocuum*[Clostridium butyricum, *Clostridium leptum*[Clostridium butyricum, *Clostridium mayombei*[Clostridium butyricum, *Clostridium methylpentosum*[Clostridium butyricum, *Clostridium nexile*[Clostridium butyricum, *Clostridium orbiscindens*[Clostridium butyricum, *Clostridium perfringens*[Clostridium butyricum, *Clostridium saccharolyticum*[Clostridium butyricum, *Clostridium scindens*[Clostridium butyricum, *Clostridium symbiosum*[Clostridium butyricum, *Clostridium tertium*[Clostridium butyricum, *Collinsella aerofaciens*[Clostridium butyricum, *Collinsella intestinalis*[Clostridium butyricum, *Collinsella stercoris*[Clostridium butyricum, *Coprobacillus sp.* D7[Clostridium butyricum, *Coprococcus catus*[Clostridium butyricum, *Coprococcus comes*[Clostridium butyricum, *Coprococcus eutactus*[Clostridium butyricum, *Corynebacterium aurimucosum*[Clostridium butyricum, *Corynebacterium matruchotii*[Clostridium butyricum, *Cryptobacterium curtum*[Clostridium butyricum, *Desulfovibrio desulfuricans*[Clostridium butyricum, *Desulfovibrio piger*[Clostridium butyricum, *Dialister invisus*[Clostridium butyricum, *Dialister microaerophilus*[Clostridium butyricum, *Dorea formicigenerans*[Clostridium butyricum, *Dorea longicatena*[Clostridium butyricum, *Eggerthella lenta*[Clostridium butyricum, *Eikenella corrodens*[Clostridium butyricum, *Enterobacter cancerogenus*[Clostridium butyricum, *Enterobacter cloacae*[Clostridium butyricum, *Enterococcus faecalis*[Clostridium butyricum, *Enterococcus faecium*[Clostridium butyricum, *Enterococcus gallinarum*[Clostridium butyricum, *Erysipelotrichaceae bacterium 3_1_53*[Clostridium butyricum, *Escherichia coli*[Clostridium butyricum, *Escherichia fergusonii*[Clostridium butyricum, *Ethanoligenens harbinense*[Clostridium butyricum, *Eubacterium cellulosolvens*[Clostridium butyricum, *Eubacterium eligens*[Clostridium butyricum, *Eubacterium limosum*[Clostridium butyricum, *Eubacterium rectale*[Clostridium butyricum, *Eubacterium saikei*[Clostridium butyricum, *Eubacterium ventriosum*[Clostridium butyricum, *Faecalibacterium prausnitzii*[Clostridium butyricum, *Finegoldia magna*[Clostridium butyricum, *Fusobacterium gonidiaformans*[Clostridium butyricum, *Fusobacterium mortiferum*[Clostridium butyricum, *Fusobacterium nucleatum*[Clostridium butyricum, *Fusobacterium varium*[Clostridium butyricum, *Gardnerella vaginalis*[Clostridium butyricum, *Gemella haemolysans*[Clostridium butyricum, *Gemella morbillorum*[Clostridium butyricum, *Gordonibacter pamelaeae*[Clostridium butyricum, *Granulicatella adiacens*[Clostridium butyricum, *Granulicatella elegans*[Clostridium butyricum, *Haemophilus influenzae*[Clostridium butyricum, *Haemophilus parainfluenzae*[Clostridium butyricum, *Helicobacter pullorum*[Clostridium butyricum, *Helicobacter pylori*[Clostridium butyricum, *Holdemania filiformis*[Clostridium butyricum, *Kingella oralis*[Clostridium butyricum, *Klebsiella pneumoniae*[Clostridium butyricum, *Klebsiella variicola*[Clostridium butyricum, *Lachnospiraceae bacterium 5_1_57FAA*[Clostridium butyricum, *Lactobacillus acidophilus*[Clostridium butyricum, *Lactobacillus amylovorus*[Clostridium butyricum, *Lactobacillus brevis*[Clostridium butyricum, *Lactobacillus casei*[Clostridium butyricum, *Lactobacillus crispatus*[Clostridium butyricum, *Lactobacillus delbrueckii*[Clostridium butyricum, *Lactobacillus fermentum*[Clostridium butyricum, *Lactobacillus gasseri*[Clostridium butyricum, *Lactobacillus iners*[Clostridium butyricum, *Lactobacillus jensenii*[Clostridium butyricum, *Lactobacillus johnsonii*[Clostridium butyricum, *Lactobacillus paracasei*[Clostridium butyricum, *Lactobacillus plantarum*[Clostridium butyricum, *Lactobacillus reuteri*[Clostridium butyricum, *Lactobacillus rhamnosus*[Clostridium butyricum, *Lactobacillus ruminis*[Clostridium butyricum, *Lactobacillus sakei*[Clostridium butyricum, *Lactobacillus salivarius*[Clostridium butyricum, *Lactococcus lactis*[Clostridium butyricum, *Lautropia mirabilis*[Clostridium butyricum, *Leuconostoc citreum*[Clostridium butyricum, *Leuconostoc gasicomitatum*[Clostridium butyricum, *Leuconostoc mesenteroides*[Clostridium butyricum, *Listeria monocytogenes*[Clostridium butyricum, *Marvinbryantia formatexigens*[Clostridium butyricum, *Megamonas hypermegale*[Clostridium butyricum, *Megasphaera micronuciformis*[Clostridium butyricum, *Methanobrevibacter smithii*[Clostridium butyricum, *Methanospaera stadmanae*[Clostridium butyricum, *Methylobacterium radiotolerans*[Clostridium butyricum, *Mitsuokella multacida*[Clostridium butyricum, *Mobiluncus curtisii*[Clostridium butyricum, *Mycoplasma hominis*[Clostridium butyricum, *Neisseria mucosa*[Clostridium butyricum, *Odoribacter splanchnicus*[Clostridium butyricum, *Olsenella uli*[Clostridium butyricum, *Oribacterium sinus*[Clostridium butyricum, *Oxalobacter formigenes*[Clostridium butyricum, *Parabacteroides distasonis*[Clostridium butyricum, *Parabacteroides johnsonii*[Clostridium butyricum, *Parabacteroides merdae*[Clostridium butyricum, *Parvimonas micra*[Clostridium butyricum, *Pediococcus acidilactici*[Clostridium butyricum, *Pediococcus pentosaceus*[Clostridium butyricum, *Peptoniphilus duerdenii*[Clostridium butyricum, *Peptoniphilus harei*[Clostridium butyricum, *Peptoniphilus lacrimalis*[Clostridium butyricum, *Peptostreptococcus anaerobius*[Clostridium butyricum, *Peptostreptococcus stomatis*[Clostridium butyricum, *Porphyromonas asaccharolytica*[Clostridium butyricum, *Porphyromonas uenonis*[Clostridium butyricum, *Prevotella amnii*[Clostridium butyricum, *Prevotella bergensis*[Clostridium butyricum, *Prevotella bivia*[Clostridium butyricum, *Prevotella buccae*[Clostridium butyricum, *Prevotella buccalis*[Clostridium butyricum, *Prevotella copri*[Clostridium butyricum, *Prevotella disiens*[Clostridium butyricum, *Prevotella melaninogenica*[Clostridium butyricum, *Prevotella multiformis*[Clostridium butyricum, *Prevotella oralis*[Clostridium butyricum, *Prevotella oris*[Clostridium butyricum, *Prevotella salivae*[Clostridium butyricum, *Prevotella timonensis*[Clostridium butyricum, *Propionibacterium acnes*[Clostridium butyricum, *Propionibacterium freudenreichii*[Clostridium butyricum, *Proteus mirabilis*[Clostridium butyricum, *Proteus penneri*[Clostridium butyricum, *Pseudoflavonifractor capillosus*[Clostridium butyricum, *Pseudomonas aeruginosa*[Clostridium butyricum, *Pseudomonas fluorescens*[Clostridium butyricum, *Pseudomonas putida*[Clostridium butyricum, *Pseudoramibacter alactolyticus*[Clostridium butyricum, *Pyramidobacter piscolens*[Clostridium butyricum, *Rhodopseudomonas palustris*[Clostridium butyricum, *Roseburia intestinalis*[Clostridium butyricum, *Roseburia inulinivorans*[Clostridium butyricum, *Rothia dentocariosa*[Clostridium butyricum, *Rothia mucilaginosa*[Clostridium butyricum, *Ruminococcus albus*[Clostridium butyricum, *Ruminococcus bromii*[Clostridium butyricum, *Ruminococcus gnavus*[Clostridium butyricum, *Ruminococcus lactaris*[Clostridium butyricum, *Ruminococcus obeum*[Clostridium butyricum, *Ruminococcus torques*[Clostridium butyricum, *Selenomonas sputigena*[Clostridium butyricum, *Shigella boydii*[Clostridium butyricum, *Shigella dysenteriae*[Clostridium butyricum, *Shigella sonnei*[Clostridium butyricum, *Slackia exigua*[Clostridium butyricum, *Solobacterium moorei*[Clostridium butyricum, *Staphylococcus aureus*[Clostridium butyricum, *Staphylococcus epidermidis*[Clostridium butyricum, *Staphylococcus hominis*[Clostridium butyricum, *Staphylococcus saprophyticus*[Clostridium butyricum, *Staphylococcus warneri*[Clostridium butyricum, *Streptococcus agalactiae*[Clostridium butyricum, *Streptococcus anginosus*[Clostridium butyricum, *Streptococcus australis*[Clostridium butyricum, *Streptococcus bovis*[Clostridium butyricum, *Streptococcus cristatus*[Clostridium butyricum, *Streptococcus dysgalactiae*[Clostridium butyricum, *Streptococcus equinus*[Clostridium butyricum, *Streptococcus gordonii*[Clostridium butyricum, *Streptococcus infantarius*[Clostridium butyricum, *Streptococcus infantis*[Clostridium butyricum, *Streptococcus mitis*[Clostridium butyricum, *Streptococcus mutans*[Clostridium butyricum, *Streptococcus oralis*[Clostridium butyricum, *Streptococcus parasanguinis*[Clostridium butyricum, *Streptococcus*

peroris|Clostridium difficile|Streptococcus pneumoniae|Clostridium difficile|Streptococcus salivarius|Clostridium difficile|Streptococcus sanguinis|Clostridium difficile|Streptococcus thermophilus|Clostridium difficile|Streptococcus vestibularis|Clostridium difficile|Subdoligranulum variable|Clostridium difficile|Succinatimonas hippei|Clostridium difficile|Sutterella wadsworthensis|Clostridium difficile|Tropheryma whippelii|Clostridium difficile|Veillonella atypica|Clostridium difficile|Veillonella dispar|Clostridium difficile|Veillonella parvula|Clostridium difficile|Victivallis vadensis|Clostridium disporicum|Clostridium disporicum|Clostridium disporicum|Clostridium hathewayi|Clostridium disporicum|Clostridium hylemonae|Clostridium disporicum|Clostridium innocuum|Clostridium disporicum|Clostridium leptum|Clostridium disporicum|Clostridium mayombeii|Clostridium disporicum|Clostridium methylpentosum|Clostridium disporicum|Clostridium nexile|Clostridium disporicum|Clostridium orbiscindens|Clostridium disporicum|Clostridium perfringens|Clostridium disporicum|Clostridium saccharolyticum|Clostridium disporicum|Clostridium scindens|Clostridium disporicum|Clostridium symbiosum|Clostridium disporicum|Clostridium tertium|Clostridium disporicum|Collinsella aerofaciens|Clostridium disporicum|Collinsella intestinalis|Clostridium disporicum|Collinsella stercoris|Clostridium disporicum|Corynebacterium aurimucosum|Clostridium disporicum|Corynebacterium matruchotii|Clostridium disporicum|Cryptobacterium curtum|Clostridium disporicum|Desulfovibrio desulfuricans|Clostridium disporicum|Desulfovibrio piger|Clostridium disporicum|Dialister invisus|Clostridium disporicum|Dialister microaerophilus|Clostridium disporicum|Dorea formicigerans|Clostridium disporicum|Dorea longicatena|Clostridium disporicum|Eggerthella lenta|Clostridium disporicum|Eikenella corrodens|Clostridium disporicum|Enterobacter cancerogenus|Clostridium disporicum|Enterobacter cloacae|Clostridium disporicum|Enterococcus faecalis|Clostridium disporicum|Enterococcus faecium|Clostridium disporicum|Enterococcus gallinarum|Clostridium disporicum|Erysipelotrichaceae bacterium 3_1_53|Clostridium disporicum|Escherichia coli|Clostridium disporicum|Escherichia fergusonii|Clostridium disporicum|Ethanoligenens harbinense|Clostridium disporicum|Eubacterium cellulosolvens|Clostridium disporicum|Eubacterium eligens|Clostridium disporicum|Eubacterium hallii|Clostridium disporicum|Eubacterium limosum|Clostridium disporicum|Eubacterium rectale|Clostridium disporicum|Eubacterium siraeum|Clostridium disporicum|Eubacterium ventriosum|Clostridium disporicum|Faecalibacterium prausnitzii|Clostridium disporicum|Finegoldia magna|Clostridium disporicum|Fusobacterium gonidiaformans|Clostridium disporicum|Fusobacterium mortiferum|Clostridium disporicum|Fusobacterium nucleatum|Clostridium disporicum|Fusobacterium varium|Clostridium disporicum|Gardnerella vaginalis|Clostridium disporicum|Gemella haemolysans|Clostridium disporicum|Gemella morbillorum|Clostridium disporicum|Gordonibacter pameleae|Clostridium disporicum|Granulicatella adiacens|Clostridium disporicum|Granulicatella elegans|Clostridium disporicum|Haemophilus influenzae|Clostridium disporicum|Haemophilus parainfluenzae|Clostridium disporicum|Helicobacter pullorum|Clostridium disporicum|Helicobacter pylori|Clostridium disporicum|Holdemania filiformis|Clostridium disporicum|Kingella oralis|Clostridium disporicum|Klebsiella pneumoniae|Clostridium disporicum|Klebsiella variicola|Clostridium disporicum|Lachnospiraceae bacterium 5_1_57FAA|Clostridium disporicum|Lactobacillus acidophilus|Clostridium disporicum|Lactobacillus amylovorus|Clostridium disporicum|Lactobacillus brevis|Clostridium disporicum|Lactobacillus casei|Clostridium disporicum|Lactobacillus crispatus|Clostridium disporicum|Lactobacillus delbrueckii|Clostridium disporicum|Lactobacillus fermentum|Clostridium disporicum|Lactobacillus gasseri|Clostridium disporicum|Lactobacillus iners|Clostridium disporicum|Lactobacillus jensenii|Clostridium disporicum|Lactobacillus johnsonii|Clostridium disporicum|Lactobacillus paracasei|Clostridium disporicum|Lactobacillus plantarum|Clostridium disporicum|Lactobacillus reuteri|Clostridium disporicum|Lactobacillus rhamnosus|Clostridium disporicum|Lactobacillus ruminis|Clostridium disporicum|Lactobacillus sakei|Clostridium disporicum|Lactobacillus salivarius|Clostridium disporicum|Lactococcus lactis|Clostridium disporicum|Lautropia mirabilis|Clostridium disporicum|Leuconostoc citreum|Clostridium disporicum|Leuconostoc gasicomitatum|Clostridium disporicum|Leuconostoc mesenteroides|Clostridium disporicum|Listeria monocytogenes|Clostridium disporicum|Marvinbryantia formatexigens|Clostridium disporicum|Megamonas hypermegale|Clostridium disporicum|Megasphaera micronuciformis|Clostridium disporicum|Methanobrevibacter smithii|Clostridium disporicum|Methanospirillum hutchinsonii|Clostridium disporicum|Methylobacterium radiotolerans|Clostridium disporicum|Mitsuokella multacida|Clostridium disporicum|Mobiluncus curtisii|Clostridium disporicum|Mycoplasma hominis|Clostridium disporicum|Neisseria mucosa|Clostridium disporicum|Odoribacter splanchnicus|Clostridium disporicum|Olsenella uli|Clostridium disporicum|Oribacterium sinus|Clostridium disporicum|Oxalobacter formigenes|Clostridium disporicum|Parabacteroides distasonis|Clostridium disporicum|Parabacteroides johnsonii|Clostridium disporicum|Parabacteroides merdae|Clostridium disporicum|Parvimonas micra|Clostridium disporicum|Pedococcus acidilactici|Clostridium disporicum|Pedococcus pentosaceus|Clostridium disporicum|Peptoniphilus duerdenii|Clostridium disporicum|Peptoniphilus harei|Clostridium disporicum|Peptoniphilus lacrimalis|Clostridium disporicum|Peptostreptococcus anaerobius|Clostridium disporicum|Peptostreptococcus stomatis|Clostridium disporicum|Porphyromonas asaccharolytica|Clostridium disporicum|Porphyromonas uenonis|Clostridium disporicum|Prevotella amnii|Clostridium disporicum|Prevotella bergensis|Clostridium disporicum|Prevotella bivia|Clostridium disporicum|Prevotella buccae|Clostridium disporicum|Prevotella buccalis|Clostridium disporicum|Prevotella copri|Clostridium disporicum|Prevotella disiens|Clostridium disporicum|Prevotella melaninogenica|Clostridium disporicum|Prevotella multiformis|Clostridium disporicum|Prevotella oralis|Clostridium disporicum|Prevotella oris|Clostridium disporicum|Prevotella salivae|Clostridium disporicum|Prevotella timonensis|Clostridium disporicum|Propionibacterium acnes|Clostridium disporicum|Propionibacterium freudenreichii|Clostridium disporicum|Proteus mirabilis|Clostridium disporicum|Proteus penneri|Clostridium disporicum|Pseudoflavonifractor capillosus|Clostridium disporicum|Pseudomonas aeruginosa|Clostridium disporicum|Pseudomonas fluorescens|Clostridium disporicum|Pseudomonas putida|Clostridium disporicum|Pseudoramibacter alactolyticus|Clostridium disporicum|Pyramidobacter piscicola|Clostridium disporicum|Rhodospirillum rubrum|Clostridium disporicum|Roseburia intestinalis|Clostridium disporicum|Roseburia inulinivorans|Clostridium disporicum|Rothia dentocariosa|Clostridium disporicum|Rothia mucilaginosa|Clostridium disporicum|Ruminococcus albus|Clostridium disporicum|Ruminococcus bromii|Clostridium disporicum|Ruminococcus gnavus|Clostridium disporicum|Ruminococcus lactaris|Clostridium disporicum|Ruminococcus oboum|Clostridium disporicum|Ruminococcus torques|Clostridium disporicum|Selenomonas putigena|Clostridium disporicum|Shigella boydii|Clostridium disporicum|Shigella dysenteriae|Clostridium disporicum|Shigella sonnei|Clostridium disporicum|Slackia exigua|Clostridium disporicum|Solobacterium moorei|Clostridium disporicum|Staphylococcus aureus|Clostridium disporicum|Staphylococcus epidermidis|Clostridium disporicum|Staphylococcus hominis|Clostridium disporicum|Staphylococcus saprophyticus|Clostridium disporicum|Staphylococcus warneri|Clostridium disporicum|Streptococcus agalactiae|Clostridium disporicum|Streptococcus anginosus|Clostridium disporicum|Streptococcus anginosus|Clostridium disporicum|Streptococcus bovis|Clostridium disporicum|Streptococcus cristatus|Clostridium disporicum|Streptococcus dysgalactiae|Clostridium disporicum|Streptococcus equinus|Clostridium disporicum|Streptococcus gordonii|Clostridium disporicum|Streptococcus infantarius|Clostridium disporicum|Streptococcus infantis|Clostridium disporicum|Streptococcus mitis|Clostridium disporicum|Streptococcus mutans|Clostridium disporicum|Streptococcus oralis|Clostridium disporicum|Streptococcus parasanguinis|Clostridium disporicum|Streptococcus peroris|Clostridium disporicum|Streptococcus pneumoniae|Clostridium disporicum|Streptococcus salivarius|Clostridium disporicum|Streptococcus vestibularis|Clostridium disporicum|Subdoligranulum variable|Clostridium disporicum|Succinatimonas hippei|Clostridium disporicum|Sutterella wadsworthensis|Clostridium disporicum|Tropheryma whippelii|Clostridium disporicum|Veillonella atypica|Clostridium disporicum|Veillonella dispar|Clostridium disporicum|Veillonella parvula|Clostridium disporicum|Victivallis vadensis|Clostridium hathewayi|Clostridium hathewayi|Clostridium hathewayi|Clostridium hylemonae|Clostridium hathewayi|Clostridium innocuum|Clostridium hathewayi|Clostridium leptum|Clostridium hathewayi|Clostridium mayombeii|Clostridium hathewayi|Clostridium methylpentosum|Clostridium hathewayi|Clostridium nexile|Clostridium hathewayi|Clostridium orbiscindens|Clostridium hathewayi|Clostridium perfringens|Clostridium hathewayi|Clostridium symbiosum|Clostridium hathewayi|Clostridium tertium|Clostridium hathewayi|Collinsella aerofaciens|Clostridium hathewayi|Collinsella intestinalis|Clostridium hathewayi|Collinsella stercoris|Clostridium hathewayi|Corynebacterium aurimucosum|Clostridium hathewayi|Corynebacterium matruchotii|Clostridium hathewayi|Desulfovibrio desulfuricans|Clostridium hathewayi|Desulfovibrio piger|Clostridium hathewayi|Dialister invisus|Clostridium hathewayi|Dialister microaerophilus|Clostridium hathewayi|Dorea formicigerans|Clostridium hathewayi|Dorea longicatena|Clostridium hathewayi|Eggerthella lenta|Clostridium hathewayi|Eikenella corrodens|Clostridium hathewayi|Enterobacter cancerogenus|Clostridium hathewayi|Enterobacter cloacae|Clostridium hathewayi|Enterococcus faecalis|Clostridium hathewayi|Enterococcus faecium|Clostridium hathewayi|Enterococcus gallinarum|Clostridium hathewayi|Erysipelotrichaceae bacterium 3_1_53|Clostridium hathewayi|Escherichia coli|Clostridium hathewayi|Escherichia fergusonii|Clostridium hathewayi|Eubacterium cellulosolvens|Clostridium hathewayi|Eubacterium eligens|Clostridium hathewayi|Eubacterium hallii|Clostridium hathewayi|Eubacterium limosum|Clostridium hathewayi|Eubacterium rectale|Clostridium hathewayi|Eubacterium siraeum|Clostridium hathewayi|Eubacterium ventriosum|Clostridium hathewayi|Faecalibacterium prausnitzii|Clostridium hathewayi|Finegoldia magna|Clostridium hathewayi|Fusobacterium gonidiaformans|Clostridium hathewayi|Fusobacterium mortiferum|Clostridium hathewayi|Fusobacterium nucleatum|Clostridium hathewayi|Fusobacterium varium|Clostridium hathewayi|Gardnerella vaginalis|Clostridium hathewayi|Gemella haemolysans|Clostridium hathewayi|Gemella morbillorum|Clostridium hathewayi|Gordonibacter pameleae|Clostridium hathewayi|Granulicatella adiacens|Clostridium hathewayi|Granulicatella elegans|Clostridium hathewayi|Haemophilus influenzae|Clostridium hathewayi|Haemophilus parainfluenzae|Clostridium hathewayi|Helicobacter pullorum|Clostridium hathewayi|Helicobacter pylori|Clostridium hathewayi|Holdemania filiformis|Clostridium hathewayi|Kingella oralis|Clostridium hathewayi|Klebsiella pneumoniae|Clostridium hathewayi|Klebsiella variicola|Clostridium hathewayi|Lachnospiraceae bacterium 5_1_57FAA|Clostridium hathewayi|Lactobacillus acidophilus|Clostridium hathewayi|Lactobacillus amylovorus|Clostridium hathewayi|Lactobacillus brevis|Clostridium hathewayi|Lactobacillus casei|Clostridium hathewayi|Lactobacillus crispatus|Clostridium hathewayi|Lactobacillus delbrueckii|Clostridium hathewayi|Lactobacillus fermentum|Clostridium hathewayi|Lactobacillus gasseri|Clostridium hathewayi|Lactobacillus iners|Clostridium hathewayi|Lactobacillus jensenii|Clostridium hathewayi|Lactobacillus johnsonii|Clostridium hathewayi|Lactobacillus paracasei|Clostridium hathewayi|Lactobacillus plantarum|Clostridium hathewayi|Lactobacillus reuteri|Clostridium hathewayi|Lactobacillus rhamnosus|Clostridium hathewayi|Lactobacillus ruminis|Clostridium hathewayi|Lactobacillus sakei|Clostridium hathewayi|Lactobacillus salivarius|Clostridium hathewayi|Lactococcus lactis|Clostridium hathewayi|Lautropia mirabilis|Clostridium hathewayi|Leuconostoc citreum|Clostridium hathewayi|Leuconostoc gasicomitatum|Clostridium hathewayi|Leuconostoc mesenteroides|Clostridium hathewayi|Listeria monocytogenes|Clostridium hathewayi|Marvinbryantia formatexigens|Clostridium hathewayi|Megamonas hypermegale|Clostridium hathewayi|Megasphaera micronuciformis|Clostridium hathewayi|Methanobrevibacter smithii|Clostridium hathewayi|Methanospirillum hutchinsonii|Clostridium hathewayi|Methylobacterium radiotolerans|Clostridium hathewayi|Mitsuokella multacida|Clostridium hathewayi|Mobiluncus curtisii|Clostridium hathewayi|Mycoplasma hominis|Clostridium hathewayi|Neisseria mucosa|Clostridium hathewayi|Odoribacter splanchnicus|Clostridium hathewayi|Olsenella uli|Clostridium hathewayi|Oribacterium sinus|Clostridium hathewayi|Oxalobacter formigenes|Clostridium hathewayi|Parabacteroides distasonis|Clostridium hathewayi|Parabacteroides johnsonii|Clostridium hathewayi|Parabacteroides merdae|Clostridium hathewayi|Parvimonas micra|Clostridium hathewayi|Pedococcus acidilactici|Clostridium hathewayi|Pedococcus pentosaceus|Clostridium hathewayi|Peptoniphilus duerdenii|Clostridium hathewayi|Peptoniphilus harei|Clostridium hathewayi|Peptoniphilus lacrimalis|Clostridium hathewayi|Peptostreptococcus anaerobius|Clostridium hathewayi|Peptostreptococcus stomatis|Clostridium hathewayi|Porphyromonas asaccharolytica|Clostridium hathewayi|Porphyromonas uenonis|Clostridium hathewayi|Prevotella amnii|Clostridium hathewayi|Prevotella bergensis|Clostridium hathewayi|Prevotella bivia|Clostridium hathewayi|Prevotella buccae|Clostridium hathewayi|Prevotella buccalis|Clostridium hathewayi|Prevotella copri|Clostridium hathewayi|Prevotella disiens|Clostridium hathewayi|Prevotella melaninogenica|Clostridium hathewayi|Prevotella multiformis|Clostridium hathewayi|Prevotella oralis|Clostridium hathewayi|Prevotella oris|Clostridium hathewayi|Prevotella salivae|Clostridium hathewayi|Prevotella timonensis|Clostridium hathewayi|Propionibacterium acnes|Clostridium hathewayi|Propionibacterium freudenreichii|Clostridium hathewayi|Proteus mirabilis|Clostridium hathewayi|Proteus penneri|Clostridium hathewayi|Pseudoflavonifractor capillosus|Clostridium hathewayi|Pseudomonas aeruginosa|Clostridium hathewayi|Pseudomonas fluorescens|Clostridium hathewayi|Pseudomonas putida|Clostridium hathewayi|Pseudoramibacter alactolyticus|Clostridium hathewayi|Pyramidobacter piscicola|Clostridium hathewayi|Rhodospirillum rubrum|Clostridium hathewayi|Rhodospseudomonas palustris|Clostridium hathewayi|Roseburia intestinalis|Clostridium hathewayi|Roseburia inulinivorans|Clostridium hathewayi|Rothia dentocariosa|Clostridium hathewayi|Rothia mucilaginosa|Clostridium hathewayi|Ruminococcus albus|Clostridium hathewayi|Ruminococcus bromii|Clostridium hathewayi|Ruminococcus gnavus|Clostridium hathewayi|Ruminococcus lactaris|Clostridium hathewayi|Ruminococcus oboum|Clostridium hathewayi|Ruminococcus torques|Clostridium hathewayi|Selenomonas putigena|Clostridium hathewayi|Shigella boydii|Clostridium hathewayi|Shigella dysenteriae|Clostridium hathewayi|Shigella sonnei|Clostridium hathewayi|Slackia exigua|Clostridium hathewayi|Solobacterium moorei|Clostridium hathewayi|Staphylococcus aureus|Clostridium hathewayi|Staphylococcus epidermidis|Clostridium hathewayi|Staphylococcus hominis|Clostridium hathewayi|Staphylococcus saprophyticus|Clostridium hathewayi|Staphylococcus warneri|Clostridium hathewayi|Streptococcus agalactiae|Clostridium hathewayi|Streptococcus anginosus|Clostridium hathewayi|Streptococcus anginosus|Clostridium hathewayi|Streptococcus bovis|Clostridium hathewayi|Streptococcus cristatus|Clostridium hathewayi|Streptococcus dysgalactiae|Clostridium hathewayi|Streptococcus equinus|Clostridium hathewayi|Streptococcus gordonii|Clostridium hathewayi|Streptococcus infantarius|Clostridium hathewayi|Streptococcus infantis|Clostridium hathewayi|Streptococcus mitis|Clostridium hathewayi|Streptococcus mutans|Clostridium hathewayi|Streptococcus oralis|Clostridium hathewayi|Streptococcus parasanguinis|Clostridium hathewayi|Streptococcus peroris|Clostridium hathewayi|Streptococcus pneumoniae|Clostridium hathewayi|Streptococcus salivarius|Clostridium hathewayi|Streptococcus vestibularis|Clostridium hathewayi|Subdoligranulum variable|Clostridium hathewayi|Succinatimonas hippei|Clostridium hathewayi|Sutterella wadsworthensis|Clostridium hathewayi|Tropheryma whippelii|Clostridium hathewayi|Veillonella atypica|Clostridium hathewayi|Veillonella dispar|Clostridium hathewayi|Veillonella parvula|Clostridium hathewayi|Victivallis vadensis|Clostridium hylemonae|Clostridium hylemonae|Clostridium innocuum|Clostridium hylemonae|Clostridium leptum|Clostridium hylemonae|Clostridium mayombeii|Clostridium hylemonae|Clostridium methylpentosum|Clostridium hylemonae|Clostridium nexile|Clostridium hylemonae|Clostridium orbiscindens|Clostridium hylemonae|Clostridium perfringens|Clostridium hylemonae|Clostridium saccharolyticum|Clostridium hylemonae|Clostridium scindens|Clostridium hylemonae|Clostridium symbiosum|Clostridium hylemonae|Clostridium tertium|Clostridium hylemonae|Collinsella aerofaciens|Clostridium hylemonae|Collinsella intestinalis|Clostridium hylemonae|Collinsella stercoris|Clostridium

hylemonae, Coprobacillus sp. D7/Clostridium hylemonae, Coprococcus catus/Clostridium hylemonae, Coprococcus comes/Clostridium hylemonae, Coprococcus eutactus/Clostridium hylemonae, Corynebacterium aurimucosum/Clostridium hylemonae, Corynebacterium matruchotii/Clostridium hylemonae, Cryptobacterium curtum/Clostridium hylemonae, Desulfovibrio desulfuricans/Clostridium hylemonae, Desulfovibrio piger/Clostridium hylemonae, Dialister invisus/Clostridium hylemonae, Dialister microaerophilus/Clostridium hylemonae, Dorea formicigenerans/Clostridium hylemonae, Dorea longicatena/Clostridium hylemonae, Eggerthella lenta/Clostridium hylemonae, Eikenella corrodens/Clostridium hylemonae, Enterobacter cancerogenus/Clostridium hylemonae, Enterobacter cloacae/Clostridium hylemonae, Enterococcus faecalis/Clostridium hylemonae, Enterococcus faecium/Clostridium hylemonae, Enterococcus gallinarum/Clostridium hylemonae, Erysipelotrichaceae bacterium 3_1_53/Clostridium hylemonae, Escherichia coli/Clostridium hylemonae, Escherichia fergusonii/Clostridium hylemonae, Ethanoligenens harbinense/Clostridium hylemonae, Eubacterium cellulosolvens/Clostridium hylemonae, Eubacterium eligens/Clostridium hylemonae, Eubacterium hallii/Clostridium hylemonae, Eubacterium limosum/Clostridium hylemonae, Eubacterium rectale/Clostridium hylemonae, Eubacterium siraeum/Clostridium hylemonae, Eubacterium ventriosum/Clostridium hylemonae, Faecalibacterium prausnitzii/Clostridium hylemonae, Finegoldia magna/Clostridium hylemonae, Fusobacterium gonidiaformans/Clostridium hylemonae, Fusobacterium mortiferum/Clostridium hylemonae, Fusobacterium nucleatum/Clostridium hylemonae, Fusobacterium varium/Clostridium hylemonae, Gardnerella vaginalis/Clostridium hylemonae, Gemella haemolysans/Clostridium hylemonae, Gemella morbillorum/Clostridium hylemonae, Gordonibacter pamelaee/Clostridium hylemonae, Granulicatella adiacens/Clostridium hylemonae, Granulicatella elegans/Clostridium hylemonae, Haemophilus influenzae/Clostridium hylemonae, Haemophilus parainfluenzae/Clostridium hylemonae, Helicobacter pullorum/Clostridium hylemonae, Helicobacter pylori/Clostridium hylemonae, Holdemania filiformis/Clostridium hylemonae, Kingella oralis/Clostridium hylemonae, Klebsiella pneumoniae/Clostridium hylemonae, Klebsiella varicola/Clostridium hylemonae, Lachnospiraceae bacterium 5_1_57FAA/Clostridium hylemonae, Lactobacillus acidophilus/Clostridium hylemonae, Lactobacillus amylovorus/Clostridium hylemonae, Lactobacillus brevis/Clostridium hylemonae, Lactobacillus casei/Clostridium hylemonae, Lactobacillus crispatus/Clostridium hylemonae, Lactobacillus delbrueckii/Clostridium hylemonae, Lactobacillus fermentum/Clostridium hylemonae, Lactobacillus gasseri/Clostridium hylemonae, Lactobacillus iners/Clostridium hylemonae, Lactobacillus jensenii/Clostridium hylemonae, Lactobacillus johnsonii/Clostridium hylemonae, Lactobacillus paracasei/Clostridium hylemonae, Lactobacillus plantarum/Clostridium hylemonae, Lactobacillus reuteri/Clostridium hylemonae, Lactobacillus rhamnosus/Clostridium hylemonae, Lactobacillus ruminis/Clostridium hylemonae, Lactobacillus sakei/Clostridium hylemonae, Lactobacillus salivarius/Clostridium hylemonae, Lactococcus lactis/Clostridium hylemonae, Lautropia mirabilis/Clostridium hylemonae, Leuconostoc citreum/Clostridium hylemonae, Leuconostoc gasicomitatum/Clostridium hylemonae, Leuconostoc mesenteroides/Clostridium hylemonae, Listeria monocytogenes/Clostridium hylemonae, Marvinbryantia formatexigenis/Clostridium hylemonae, Megamonas hypermegale/Clostridium hylemonae, Megaphaera microciformis/Clostridium hylemonae, Methanobrevibacter smithii/Clostridium hylemonae, Methanospaera stadtnanae/Clostridium hylemonae, Methylobacterium radiotolerans/Clostridium hylemonae, Mitsukella multacida/Clostridium hylemonae, Mobiluncus curtisii/Clostridium hylemonae, Mycoplasma hominis/Clostridium hylemonae, Neisseria mucosa/Clostridium hylemonae, Odoribacter splanchnicus/Clostridium hylemonae, Olsenella uli/Clostridium hylemonae, Oribacterium sinus/Clostridium hylemonae, Oxalobacter formigenes/Clostridium hylemonae, Parabacteroides distans/Clostridium hylemonae, Parabacteroides johnsonii/Clostridium hylemonae, Parabacteroides merdae/Clostridium hylemonae, Parvimonas micra/Clostridium hylemonae, Pedicoccus acidilactici/Clostridium hylemonae, Pedicoccus pentosaceus/Clostridium hylemonae, Peptoniphilus duerdenii/Clostridium hylemonae, Peptoniphilus harei/Clostridium hylemonae, Peptoniphilus lacrimalis/Clostridium hylemonae, Peptostreptococcus anaerobius/Clostridium hylemonae, Peptostreptococcus stomatis/Clostridium hylemonae, Porphyromonas asaccharolytica/Clostridium hylemonae, Porphyromonas uenonis/Clostridium hylemonae, Prevotella annii/Clostridium hylemonae, Prevotella bergensis/Clostridium hylemonae, Prevotella bivia/Clostridium hylemonae, Prevotella buccae/Clostridium hylemonae, Prevotella buccalis/Clostridium hylemonae, Prevotella copri/Clostridium hylemonae, Prevotella disiens/Clostridium hylemonae, Prevotella melaninogenica/Clostridium hylemonae, Prevotella multiformis/Clostridium hylemonae, Prevotella oralis/Clostridium hylemonae, Prevotella oris/Clostridium hylemonae, Prevotella salivae/Clostridium hylemonae, Prevotella timonensis/Clostridium hylemonae, Propionibacterium acnes/Clostridium hylemonae, Propionibacterium freudenreichii/Clostridium hylemonae, Proteus mirabilis/Clostridium hylemonae, Proteus penneri/Clostridium hylemonae, Pseudoalcaligenes capillosus/Clostridium hylemonae, Pseudomonas aeruginosa/Clostridium hylemonae, Pseudomonas fluorescens/Clostridium hylemonae, Pseudomonas putida/Clostridium hylemonae, Pseudorambacter alactolyticus/Clostridium hylemonae, Pyramidobacter piscicola/Clostridium hylemonae, Rhodopseudomonas palustris/Clostridium hylemonae, Roseburia intestinalis/Clostridium hylemonae, Roseburia inulinivorans/Clostridium hylemonae, Rothia dentocariosa/Clostridium hylemonae, Rothia mucilaginosa/Clostridium hylemonae, Ruminococcus albus/Clostridium hylemonae, Ruminococcus bromii/Clostridium hylemonae, Ruminococcus gnavus/Clostridium hylemonae, Ruminococcus lactaris/Clostridium hylemonae, Ruminococcus obeum/Clostridium hylemonae, Ruminococcus torques/Clostridium hylemonae, Selenomonas spungena/Clostridium hylemonae, Shigella boydii/Clostridium hylemonae, Shigella dysenteriae/Clostridium hylemonae, Shigella sonnei/Clostridium hylemonae, Slackia exigua/Clostridium hylemonae, Solobacterium moorei/Clostridium hylemonae, Staphylococcus aureus/Clostridium hylemonae, Staphylococcus epidermidis/Clostridium hylemonae, Staphylococcus hominis/Clostridium hylemonae, Staphylococcus saprophyticus/Clostridium hylemonae, Staphylococcus warneri/Clostridium hylemonae, Streptococcus agalactiae/Clostridium hylemonae, Streptococcus anginosus/Clostridium hylemonae, Streptococcus australis/Clostridium hylemonae, Streptococcus bovis/Clostridium hylemonae, Streptococcus cristatus/Clostridium hylemonae, Streptococcus dysgalactiae/Clostridium hylemonae, Streptococcus equinus/Clostridium hylemonae, Streptococcus gordonii/Clostridium hylemonae, Streptococcus infantarius/Clostridium hylemonae, Streptococcus infantis/Clostridium hylemonae, Streptococcus mitis/Clostridium hylemonae, Streptococcus mutans/Clostridium hylemonae, Streptococcus oralis/Clostridium hylemonae, Streptococcus peroris/Clostridium hylemonae, Streptococcus pneumoniae/Clostridium hylemonae, Streptococcus salivarius/Clostridium hylemonae, Streptococcus sanguinis/Clostridium hylemonae, Streptococcus thermophilus/Clostridium hylemonae, Streptococcus vestibularis/Clostridium hylemonae, Subdoligranulum variable/Clostridium hylemonae, Succinatimonas hippei/Clostridium hylemonae, Sutterella wadsworthensis/Clostridium hylemonae, Tropheryma whipplei/Clostridium hylemonae, Veillonella atypica/Clostridium hylemonae, Veillonella dispar/Clostridium hylemonae, Veillonella parvula/Clostridium hylemonae, Victivallis vadensis/Clostridium hylemonae, Clostridium innocuum, Clostridium leptum, Clostridium innocuum, Clostridium leptum, Clostridium innocuum, Clostridium methyleptuosum, Clostridium nobile, Clostridium orbicindens, Clostridium innocuum, Clostridium perfringens, Clostridium innocuum, Clostridium saccharolyticum, Clostridium innocuum, Clostridium scindens, Clostridium innocuum, Clostridium symbiosum, Clostridium innocuum, Clostridium tertium, Clostridium innocuum, Collinsella aerofaciens, Clostridium innocuum, Collinsella intestinalis, Clostridium innocuum, Collinsella stercoris, Clostridium innocuum, Coprobacillus sp. D7/Clostridium innocuum, Coprococcus catus, Clostridium innocuum, Coprococcus comes, Clostridium innocuum, Coprococcus eutactus, Clostridium innocuum, Corynebacterium aurimucosum, Clostridium innocuum, Corynebacterium matruchotii, Clostridium innocuum, Cryptobacterium curtum, Clostridium innocuum, Desulfovibrio desulfuricans, Clostridium innocuum, Desulfovibrio piger, Clostridium innocuum, Dialister invisus, Clostridium innocuum, Dialister microaerophilus, Clostridium innocuum, Dorea formicigenerans, Clostridium innocuum, Dorea longicatena, Clostridium innocuum, Eggerthella lenta, Clostridium innocuum, Eikenella corrodens, Clostridium innocuum, Enterobacter cancerogenus, Clostridium innocuum, Enterobacter cloacae, Clostridium innocuum, Enterococcus faecalis, Clostridium innocuum, Enterococcus faecium, Clostridium innocuum, Enterococcus gallinarum, Clostridium innocuum, Erysipelotrichaceae bacterium 3_1_53, Clostridium innocuum, Escherichia coli, Clostridium innocuum, Escherichia fergusonii, Clostridium innocuum, Ethanoligenens harbinense, Clostridium innocuum, Eubacterium cellulosolvens, Clostridium innocuum, Eubacterium eligens, Clostridium innocuum, Eubacterium hallii, Clostridium innocuum, Eubacterium limosum, Clostridium innocuum, Eubacterium rectale, Clostridium innocuum, Eubacterium siraeum, Clostridium innocuum, Eubacterium ventriosum, Clostridium innocuum, Faecalibacterium prausnitzii, Clostridium innocuum, Finegoldia magna, Clostridium innocuum, Fusobacterium gonidiaformans, Clostridium innocuum, Fusobacterium mortiferum, Clostridium innocuum, Fusobacterium nucleatum, Clostridium innocuum, Fusobacterium varium, Clostridium innocuum, Gardnerella vaginalis, Clostridium innocuum, Gemella haemolysans, Clostridium innocuum, Gemella morbillorum, Clostridium innocuum, Gordonibacter pamelaee, Clostridium innocuum, Granulicatella adiacens, Clostridium innocuum, Granulicatella elegans, Clostridium innocuum, Haemophilus influenzae, Clostridium innocuum, Haemophilus parainfluenzae, Clostridium innocuum, Helicobacter pullorum, Clostridium innocuum, Helicobacter pylori, Clostridium innocuum, Holdemania filiformis, Clostridium innocuum, Kingella oralis, Clostridium innocuum, Klebsiella pneumoniae, Clostridium innocuum, Klebsiella varicola, Clostridium innocuum, Lachnospiraceae bacterium 5_1_57FAA, Clostridium innocuum, Lactobacillus acidophilus, Clostridium innocuum, Lactobacillus amylovorus, Clostridium innocuum, Lactobacillus brevis, Clostridium innocuum, Lactobacillus casei, Clostridium innocuum, Lactobacillus crispatus, Clostridium innocuum, Lactobacillus delbrueckii, Clostridium innocuum, Lactobacillus fermentum, Clostridium innocuum, Lactobacillus gasseri, Clostridium innocuum, Lactobacillus iners, Clostridium innocuum, Lactobacillus jensenii, Clostridium innocuum, Lactobacillus johnsonii, Clostridium innocuum, Lactobacillus paracasei, Clostridium innocuum, Lactobacillus plantarum, Clostridium innocuum, Lactobacillus reuteri, Clostridium innocuum, Lactobacillus rhamnosus, Clostridium innocuum, Lactobacillus ruminis, Clostridium innocuum, Lactobacillus sakei, Clostridium innocuum, Lactobacillus salivarius, Clostridium innocuum, Lactococcus lactis, Clostridium innocuum, Lautropia mirabilis, Clostridium innocuum, Leuconostoc citreum, Clostridium innocuum, Leuconostoc mesenteroides, Clostridium innocuum, Listeria monocytogenes, Clostridium innocuum, Marvinbryantia formatexigenis, Clostridium innocuum, Megamonas hypermegale, Clostridium innocuum, Megaphaera microciformis, Clostridium innocuum, Methanobrevibacter smithii, Clostridium innocuum, Methanospaera stadtnanae, Clostridium innocuum, Methylobacterium radiotolerans, Clostridium innocuum, Mitsukella multacida, Clostridium innocuum, Mobiluncus curtisii, Clostridium innocuum, Mycoplasma hominis, Clostridium innocuum, Neisseria mucosa, Clostridium innocuum, Odoribacter splanchnicus, Clostridium innocuum, Olsenella uli, Clostridium innocuum, Oribacterium sinus, Clostridium innocuum, Oxalobacter formigenes, Clostridium innocuum, Parabacteroides distans, Clostridium innocuum, Parabacteroides johnsonii, Clostridium innocuum, Parabacteroides merdae, Clostridium innocuum, Parvimonas micra, Clostridium innocuum, Pedicoccus acidilactici, Clostridium innocuum, Pedicoccus pentosaceus, Clostridium innocuum, Peptoniphilus duerdenii, Clostridium innocuum, Peptoniphilus harei, Clostridium innocuum, Peptoniphilus lacrimalis, Clostridium innocuum, Peptostreptococcus anaerobius, Clostridium innocuum, Peptostreptococcus stomatis, Clostridium innocuum, Porphyromonas asaccharolytica, Clostridium innocuum, Porphyromonas uenonis, Clostridium innocuum, Prevotella annii, Clostridium innocuum, Prevotella bergensis, Clostridium innocuum, Prevotella bivia, Clostridium innocuum, Prevotella buccae, Clostridium innocuum, Prevotella buccalis, Clostridium innocuum, Prevotella copri, Clostridium innocuum, Prevotella disiens, Clostridium innocuum, Prevotella melaninogenica, Clostridium innocuum, Prevotella multiformis, Clostridium innocuum, Prevotella oralis, Clostridium innocuum, Prevotella oris, Clostridium innocuum, Prevotella salivae, Clostridium innocuum, Prevotella timonensis, Clostridium innocuum, Propionibacterium acnes, Clostridium innocuum, Propionibacterium freudenreichii, Clostridium innocuum, Proteus mirabilis, Clostridium innocuum, Proteus penneri, Clostridium innocuum, Pseudoalcaligenes capillosus, Clostridium innocuum, Pseudomonas aeruginosa, Clostridium innocuum, Pseudomonas fluorescens, Clostridium innocuum, Pseudomonas putida, Clostridium innocuum, Pseudorambacter alactolyticus, Clostridium innocuum, Pyramidobacter piscicola, Clostridium innocuum, Rhodopseudomonas palustris, Clostridium innocuum, Roseburia intestinalis, Clostridium innocuum, Roseburia inulinivorans, Clostridium innocuum, Rothia dentocariosa, Clostridium innocuum, Rothia mucilaginosa, Clostridium innocuum, Ruminococcus albus, Clostridium innocuum, Ruminococcus bromii, Clostridium innocuum, Ruminococcus gnavus, Clostridium innocuum, Ruminococcus lactaris, Clostridium innocuum, Ruminococcus obeum, Clostridium innocuum, Ruminococcus torques, Clostridium innocuum, Selenomonas spungena, Clostridium innocuum, Shigella boydii, Clostridium innocuum, Shigella dysenteriae, Clostridium innocuum, Shigella sonnei, Clostridium innocuum, Slackia exigua, Clostridium innocuum, Solobacterium moorei, Clostridium innocuum, Staphylococcus aureus, Clostridium innocuum, Staphylococcus epidermidis, Clostridium innocuum, Staphylococcus hominis, Clostridium innocuum, Staphylococcus saprophyticus, Clostridium innocuum, Staphylococcus warneri, Clostridium innocuum, Streptococcus agalactiae, Clostridium innocuum, Streptococcus anginosus, Clostridium innocuum, Streptococcus australis, Clostridium innocuum, Streptococcus bovis, Clostridium innocuum, Streptococcus cristatus, Clostridium innocuum, Streptococcus dysgalactiae, Clostridium innocuum, Streptococcus equinus, Clostridium innocuum, Streptococcus gordonii, Clostridium innocuum, Streptococcus infantarius, Clostridium innocuum, Streptococcus infantis, Clostridium innocuum, Streptococcus mitis, Clostridium innocuum, Streptococcus mutans, Clostridium innocuum, Streptococcus oralis, Clostridium innocuum, Streptococcus peroris, Clostridium innocuum, Streptococcus pneumoniae, Clostridium innocuum, Streptococcus salivarius, Clostridium innocuum, Streptococcus sanguinis, Clostridium innocuum, Streptococcus thermophilus, Clostridium innocuum, Streptococcus vestibularis, Clostridium innocuum, Subdoligranulum variable, Clostridium innocuum, Succinatimonas hippei, Clostridium innocuum, Sutterella wadsworthensis, Clostridium innocuum, Tropheryma whipplei, Clostridium innocuum, Veillonella atypica, Clostridium innocuum, Veillonella dispar, Clostridium innocuum, Veillonella parvula, Clostridium innocuum, Victivallis vadensis, Clostridium leptum, Clostridium leptum, Clostridium leptum, Clostridium leptum, Clostridium leptum, Clostridium methyleptuosum, Clostridium leptum, Clostridium nobile, Clostridium leptum, Clostridium orbicindens, Clostridium leptum, Clostridium perfringens, Clostridium leptum, Clostridium saccharolyticum, Clostridium leptum, Clostridium scindens, Clostridium leptum, Clostridium symbiosum, Clostridium leptum, Clostridium tertium, Clostridium leptum, Collinsella aerofaciens, Clostridium leptum, Collinsella intestinalis, Clostridium leptum, Collinsella stercoris, Clostridium leptum, Coprobacillus sp. D7/Clostridium leptum, Coprococcus catus, Clostridium leptum, Coprococcus comes, Clostridium leptum, Coprococcus eutactus, Clostridium leptum, Corynebacterium aurimucosum, Clostridium leptum, Corynebacterium matruchotii, Clostridium leptum, Cryptobacterium curtum, Clostridium leptum, Desulfovibrio desulfuricans, Clostridium leptum, Desulfovibrio piger, Clostridium leptum, Dialister invisus, Clostridium leptum, Dialister microaerophilus, Clostridium leptum, Dorea formicigenerans, Clostridium leptum, Dorea longicatena, Clostridium leptum, Eggerthella lenta, Clostridium leptum, Eikenella corrodens, Clostridium leptum, Enterobacter cancerogenus, Clostridium leptum, Enterobacter cloacae, Clostridium leptum, Enterococcus faecalis, Clostridium leptum, Enterococcus faecium, Clostridium leptum, Enterococcus gallinarum, Clostridium leptum, Erysipelotrichaceae bacterium 3_1_53, Clostridium leptum, Escherichia coli, Clostridium leptum, Escherichia fergusonii, Clostridium leptum, Ethanoligenens harbinense, Clostridium leptum, Eubacterium cellulosolvens, Clostridium leptum, Eubacterium eligens, Clostridium leptum, Eubacterium hallii, Clostridium leptum, Eubacterium limosum, Clostridium leptum, Eubacterium rectale, Clostridium leptum, Eubacterium siraeum, Clostridium leptum, Eubacterium ventriosum, Clostridium leptum, Faecalibacterium prausnitzii, Clostridium leptum, Finegoldia magna, Clostridium leptum, Fusobacterium gonidiaformans, Clostridium leptum, Fusobacterium mortiferum, Clostridium leptum, Fusobacterium nucleatum, Clostridium leptum, Fusobacterium varium, Clostridium leptum, Gardnerella vaginalis, Clostridium leptum, Gemella haemolysans, Clostridium leptum, Gemella morbillorum, Clostridium leptum, Gordonibacter

145

stadtmanae|Clostridium methylpentosum,Methylobacterium radiotolerans|Clostridium methylpentosum,Mitsuokella multacida|Clostridium methylpentosum,Mobiluncus curtisii|Clostridium methylpentosum,Mycoplasma hominis|Clostridium methylpentosum,Neisseria mucosa|Clostridium methylpentosum,Odoribacter splanchnicus|Clostridium methylpentosum,Olsenella uli|Clostridium methylpentosum,Oribacterium sinus|Clostridium methylpentosum,Oxalobacter formigenes|Clostridium methylpentosum,Parabacteroides distasonis|Clostridium methylpentosum,Parabacteroides johnsonii|Clostridium methylpentosum,Parabacteroides merdae|Clostridium methylpentosum,Parvimonas micra|Clostridium methylpentosum,Pediococcus acidilactici|Clostridium methylpentosum,Pediococcus pentosaceus|Clostridium methylpentosum,Peptoniphilus duerdenii|Clostridium methylpentosum,Peptoniphilus harei|Clostridium methylpentosum,Peptoniphilus lacrimalis|Clostridium methylpentosum,Peptostreptococcus anaerobius|Clostridium methylpentosum,Peptostreptococcus stomatis|Clostridium methylpentosum,Porphyromonas asaccharolytica|Clostridium methylpentosum,Porphyromonas uenonis|Clostridium methylpentosum,Prevotella amnii|Clostridium methylpentosum,Prevotella bergensis|Clostridium methylpentosum,Prevotella bivia|Clostridium methylpentosum,Prevotella buccae|Clostridium methylpentosum,Prevotella buccalis|Clostridium methylpentosum,Prevotella copri|Clostridium methylpentosum,Prevotella disiens|Clostridium methylpentosum,Prevotella melaninogenica|Clostridium methylpentosum,Prevotella multiformis|Clostridium methylpentosum,Prevotella oralis|Clostridium methylpentosum,Prevotella oris|Clostridium methylpentosum,Prevotella timonensis|Clostridium methylpentosum,Propionibacterium acnes|Clostridium methylpentosum,Propionibacterium freudenreichii|Clostridium methylpentosum,Proteus mirabilis|Clostridium methylpentosum,Proteus penneri|Clostridium methylpentosum,Pseudoflavonifractor capillosus|Clostridium methylpentosum,Pseudomonas aeruginosa|Clostridium methylpentosum,Pseudomonas fluorescens|Clostridium methylpentosum,Pseudomonas putida|Clostridium methylpentosum,Pseudoramibacter alactolyticus|Clostridium methylpentosum,Pyramidobacter piscolens|Clostridium methylpentosum,Rhodospseudomonas palustris|Clostridium methylpentosum,Roseburia intestinalis|Clostridium methylpentosum,Roseburia inulinivorans|Clostridium methylpentosum,Rothia dentocariosa|Clostridium methylpentosum,Rothia mucilaginosa|Clostridium methylpentosum,Ruminococcus albus|Clostridium methylpentosum,Ruminococcus bromii|Clostridium methylpentosum,Ruminococcus gnavus|Clostridium methylpentosum,Ruminococcus lactaris|Clostridium methylpentosum,Ruminococcus obeum|Clostridium methylpentosum,Ruminococcus torques|Clostridium methylpentosum,Selenomonas sputigena|Clostridium methylpentosum,Shigella boydii|Clostridium methylpentosum,Shigella dysenteriae|Clostridium methylpentosum,Shigella sonnei|Clostridium methylpentosum,Slackia exigua|Clostridium methylpentosum,Solobacterium moorei|Clostridium methylpentosum,Staphylococcus aureus|Clostridium methylpentosum,Staphylococcus epidermidis|Clostridium methylpentosum,Staphylococcus hominis|Clostridium methylpentosum,Staphylococcus saprophyticus|Clostridium methylpentosum,Staphylococcus warneri|Clostridium methylpentosum,Streptococcus agalactiae|Clostridium methylpentosum,Streptococcus anginosus|Clostridium methylpentosum,Streptococcus australis|Clostridium methylpentosum,Streptococcus bovis|Clostridium methylpentosum,Streptococcus cristatus|Clostridium methylpentosum,Streptococcus dysgalactiae|Clostridium methylpentosum,Streptococcus equinus|Clostridium methylpentosum,Streptococcus gordonii|Clostridium methylpentosum,Streptococcus infantarius|Clostridium methylpentosum,Streptococcus infantis|Clostridium methylpentosum,Streptococcus mitis|Clostridium methylpentosum,Streptococcus mutans|Clostridium methylpentosum,Streptococcus oralis|Clostridium methylpentosum,Streptococcus parasanguinis|Clostridium methylpentosum,Streptococcus peroris|Clostridium methylpentosum,Streptococcus pneumoniae|Clostridium methylpentosum,Streptococcus salivarius|Clostridium methylpentosum,Streptococcus sanguinis|Clostridium methylpentosum,Streptococcus thermophilus|Clostridium methylpentosum,Streptococcus vestibularis|Clostridium methylpentosum,Subdoligranulum variabile|Clostridium methylpentosum,Succinatimonas hippei|Clostridium methylpentosum,Sutterella wadsworthensis|Clostridium methylpentosum,Tropheryma whipplei|Clostridium methylpentosum,Veillonella atypica|Clostridium methylpentosum,Veillonella dispar|Clostridium methylpentosum,Veillonella parvula|Clostridium methylpentosum,Victivallis vadensis|Clostridium nexile|Clostridium nexile|Clostridium nexile|Clostridium orbiscindens|Clostridium nexile|Clostridium perfringens|Clostridium nexile|Clostridium saccharolyticum|Clostridium nexile|Clostridium scindens|Clostridium nexile|Clostridium symbiosum|Clostridium nexile|Clostridium tertium|Clostridium nexile|Collinsella aerofaciens|Clostridium nexile|Collinsella intestinalis|Clostridium nexile|Collinsella stercoris|Clostridium nexile|Coprobacillus sp. D7|Clostridium nexile|Coprococcus catus|Clostridium nexile|Coprococcus comes|Clostridium nexile|Coprococcus eutactus|Clostridium nexile|Corynebacterium aurimucosum|Clostridium nexile|Corynebacterium matruchotii|Clostridium nexile|Cryptobacterium curtum|Clostridium nexile|Desulfovibrio desulfuricans|Clostridium nexile|Desulfovibrio piger|Clostridium nexile|Dialister invisus|Clostridium nexile|Dialister microaerophilus|Clostridium nexile|Dorea formicigenerans|Clostridium nexile|Dorea longicatena|Clostridium nexile|Eggerthella lenta|Clostridium nexile|Eikenella corrodens|Clostridium nexile|Enterobacter cancerogenus|Clostridium nexile|Enterobacter cloacae|Clostridium nexile|Enterococcus faecalis|Clostridium nexile|Enterococcus faecium|Clostridium nexile|Enterococcus gallinarum|Clostridium nexile|Erysipelotrichaceae bacterium 3_1_53|Clostridium nexile|Escherichia coli|Clostridium nexile|Escherichia fergusonii|Clostridium nexile|Ethanoligenens harbinensis|Clostridium nexile|Eubacterium celulosolvens|Clostridium nexile|Eubacterium eligens|Clostridium nexile|Eubacterium hallii|Clostridium nexile|Eubacterium limosum|Clostridium nexile|Eubacterium rectale|Clostridium nexile|Eubacterium siraeum|Clostridium nexile|Eubacterium ventriosum|Clostridium nexile|Faecalibacterium prausnitzii|Clostridium nexile|Finegoldia magna|Clostridium nexile|Fusobacterium gonidiaformans|Clostridium nexile|Fusobacterium mortiferum|Clostridium nexile|Fusobacterium nucleatum|Clostridium nexile|Fusobacterium varium|Clostridium nexile|Gardnerella vaginalis|Clostridium nexile|Gemella haemolysans|Clostridium nexile|Gemella morbillorum|Clostridium nexile|Gordonibacter pameleae|Clostridium nexile|Granulicatella adiacens|Clostridium nexile|Granulicatella elegans|Clostridium nexile|Haemophilus influenzae|Clostridium nexile|Haemophilus parainfluenzae|Clostridium nexile|Helicobacter pullorum|Clostridium nexile|Helicobacter pylori|Clostridium nexile|Holdemania filiformis|Clostridium nexile|Kingella oralis|Clostridium nexile|Klebsiella pneumoniae|Clostridium nexile|Klebsiella varicola|Clostridium nexile|Lachnospiraceae bacterium 5_1_57FAA|Clostridium nexile|Lactobacillus acidophilus|Clostridium nexile|Lactobacillus amylovorus|Clostridium nexile|Lactobacillus brevis|Clostridium nexile|Lactobacillus casei|Clostridium nexile|Lactobacillus crispatus|Clostridium nexile|Lactobacillus delbrueckii|Clostridium nexile|Lactobacillus fermentum|Clostridium nexile|Lactobacillus gasseri|Clostridium nexile|Lactobacillus iners|Clostridium nexile|Lactobacillus jensenii|Clostridium nexile|Lactobacillus johnsonii|Clostridium nexile|Lactobacillus paracasei|Clostridium nexile|Lactobacillus plantarum|Clostridium nexile|Lactobacillus reuteri|Clostridium nexile|Lactobacillus rhamnosus|Clostridium nexile|Lactobacillus ruminis|Clostridium nexile|Lactobacillus sakei|Clostridium nexile|Lactobacillus salivarius|Clostridium nexile|Lactococcus lactis|Clostridium nexile|Lactococcus lactis|Clostridium nexile|Lautropia mirabilis|Clostridium nexile|Leuconostoc citreum|Clostridium nexile|Leuconostoc gasicomitatum|Clostridium nexile|Leuconostoc mesenteroides|Clostridium nexile|Listeria monocytogenes|Clostridium nexile|Marvinbryantia formatexigens|Clostridium nexile|Megasphaera hypermegale|Clostridium nexile|Megasphaera micronuciformis|Clostridium nexile|Methanobrevibacter smithii|Clostridium nexile|Methanospaera stadtmanae|Clostridium nexile|Methylobacterium radiotolerans|Clostridium nexile|Mitsuokella multacida|Clostridium nexile|Mobiluncus curtisii|Clostridium nexile|Mycoplasma hominis|Clostridium nexile|Neisseria mucosa|Clostridium nexile|Odoribacter splanchnicus|Clostridium nexile|Olsenella uli|Clostridium nexile|Oribacterium sinus|Clostridium nexile|Oxalobacter formigenes|Clostridium nexile|Parabacteroides distasonis|Clostridium nexile|Parabacteroides johnsonii|Clostridium nexile|Parabacteroides merdae|Clostridium nexile|Parvimonas micra|Clostridium nexile|Pediococcus acidilactici|Clostridium nexile|Pediococcus pentosaceus|Clostridium nexile|Peptoniphilus duerdenii|Clostridium nexile|Peptoniphilus harei|Clostridium nexile|Peptoniphilus lacrimalis|Clostridium nexile|Peptoniphilus harei|Clostridium nexile|Peptostreptococcus anaerobius|Clostridium nexile|Peptostreptococcus stomatis|Clostridium nexile|Porphyromonas asaccharolytica|Clostridium nexile|Porphyromonas uenonis|Clostridium nexile|Prevotella amnii|Clostridium nexile|Prevotella bergensis|Clostridium nexile|Prevotella bivia|Clostridium nexile|Prevotella buccae|Clostridium nexile|Prevotella buccalis|Clostridium nexile|Prevotella copri|Clostridium nexile|Prevotella disiens|Clostridium nexile|Prevotella melaninogenica|Clostridium nexile|Prevotella multiformis|Clostridium nexile|Prevotella oralis|Clostridium nexile|Prevotella oris|Clostridium nexile|Prevotella salivae|Clostridium nexile|Prevotella timonensis|Clostridium nexile|Propionibacterium acnes|Clostridium nexile|Propionibacterium freudenreichii|Clostridium nexile|Propionibacterium penneri|Clostridium nexile|Pseudoflavonifractor capillosus|Clostridium nexile|Pseudomonas aeruginosa|Clostridium nexile|Pseudomonas fluorescens|Clostridium nexile|Pseudomonas putida|Clostridium nexile|Pseudoramibacter alactolyticus|Clostridium nexile|Pyramidobacter piscolens|Clostridium nexile|Rhodospseudomonas palustris|Clostridium nexile|Roseburia intestinalis|Clostridium nexile|Roseburia inulinivorans|Clostridium nexile|Rothia dentocariosa|Clostridium nexile|Rothia mucilaginosa|Clostridium nexile|Ruminococcus albus|Clostridium nexile|Ruminococcus bromii|Clostridium nexile|Ruminococcus gnavus|Clostridium nexile|Ruminococcus lactaris|Clostridium nexile|Ruminococcus obeum|Clostridium nexile|Ruminococcus torques|Clostridium nexile|Selenomonas sputigena|Clostridium nexile|Shigella boydii|Clostridium nexile|Shigella dysenteriae|Clostridium nexile|Shigella sonnei|Clostridium nexile|Slackia exigua|Clostridium nexile|Solobacterium moorei|Clostridium nexile|Staphylococcus aureus|Clostridium nexile|Staphylococcus epidermidis|Clostridium nexile|Staphylococcus hominis|Clostridium nexile|Staphylococcus saprophyticus|Clostridium nexile|Staphylococcus warneri|Clostridium nexile|Streptococcus agalactiae|Clostridium nexile|Streptococcus anginosus|Clostridium nexile|Streptococcus australis|Clostridium nexile|Streptococcus bovis|Clostridium nexile|Streptococcus cristatus|Clostridium nexile|Streptococcus dysgalactiae|Clostridium nexile|Streptococcus equinus|Clostridium nexile|Streptococcus gordonii|Clostridium nexile|Streptococcus infantarius|Clostridium nexile|Streptococcus infantis|Clostridium nexile|Streptococcus mitis|Clostridium nexile|Streptococcus mutans|Clostridium nexile|Streptococcus oralis|Clostridium nexile|Streptococcus parasanguinis|Clostridium nexile|Streptococcus peroris|Clostridium nexile|Streptococcus pneumoniae|Clostridium nexile|Streptococcus salivarius|Clostridium nexile|Streptococcus sanguinis|Clostridium nexile|Streptococcus thermophilus|Clostridium nexile|Streptococcus vestibularis|Clostridium nexile|Subdoligranulum variabile|Clostridium nexile|Succinatimonas hippei|Clostridium nexile|Sutterella wadsworthensis|Clostridium nexile|Tropheryma whipplei|Clostridium nexile|Veillonella atypica|Clostridium nexile|Veillonella dispar|Clostridium nexile|Veillonella parvula|Clostridium nexile|Victivallis vadensis|Clostridium orbiscindens|Clostridium orbiscindens|Clostridium orbiscindens|Clostridium perfringens|Clostridium orbiscindens|Clostridium saccharolyticum|Clostridium orbiscindens|Clostridium scindens|Clostridium orbiscindens|Clostridium symbiosum|Clostridium orbiscindens|Clostridium tertium|Clostridium orbiscindens|Collinsella aerofaciens|Clostridium orbiscindens|Collinsella intestinalis|Clostridium orbiscindens|Collinsella stercoris|Clostridium orbiscindens|Coprobacillus sp. D7|Clostridium orbiscindens|Coprococcus catus|Clostridium orbiscindens|Coprococcus comes|Clostridium orbiscindens|Coprococcus eutactus|Clostridium orbiscindens|Corynebacterium aurimucosum|Clostridium orbiscindens|Corynebacterium matruchotii|Clostridium orbiscindens|Cryptobacterium curtum|Clostridium orbiscindens|Desulfovibrio desulfuricans|Clostridium orbiscindens|Desulfovibrio piger|Clostridium orbiscindens|Dialister invisus|Clostridium orbiscindens|Dialister microaerophilus|Clostridium orbiscindens|Dorea formicigenerans|Clostridium orbiscindens|Dorea longicatena|Clostridium orbiscindens|Eggerthella lenta|Clostridium orbiscindens|Eikenella corrodens|Clostridium orbiscindens|Enterobacter cancerogenus|Clostridium orbiscindens|Enterobacter cloacae|Clostridium orbiscindens|Enterococcus faecalis|Clostridium orbiscindens|Enterococcus faecium|Clostridium orbiscindens|Enterococcus gallinarum|Clostridium orbiscindens|Erysipelotrichaceae bacterium 3_1_53|Clostridium orbiscindens|Escherichia coli|Clostridium orbiscindens|Escherichia fergusonii|Clostridium orbiscindens|Ethanoligenens harbinensis|Clostridium orbiscindens|Eubacterium celulosolvens|Clostridium orbiscindens|Eubacterium eligens|Clostridium orbiscindens|Eubacterium hallii|Clostridium orbiscindens|Eubacterium limosum|Clostridium orbiscindens|Eubacterium rectale|Clostridium orbiscindens|Eubacterium siraeum|Clostridium orbiscindens|Eubacterium ventriosum|Clostridium orbiscindens|Faecalibacterium prausnitzii|Clostridium orbiscindens|Finegoldia magna|Clostridium orbiscindens|Fusobacterium gonidiaformans|Clostridium orbiscindens|Fusobacterium mortiferum|Clostridium orbiscindens|Fusobacterium nucleatum|Clostridium orbiscindens|Fusobacterium varium|Clostridium orbiscindens|Gardnerella vaginalis|Clostridium orbiscindens|Gemella haemolysans|Clostridium orbiscindens|Gemella morbillorum|Clostridium orbiscindens|Gordonibacter pameleae|Clostridium orbiscindens|Granulicatella adiacens|Clostridium orbiscindens|Granulicatella elegans|Clostridium orbiscindens|Haemophilus influenzae|Clostridium orbiscindens|Haemophilus parainfluenzae|Clostridium orbiscindens|Helicobacter pullorum|Clostridium orbiscindens|Helicobacter pylori|Clostridium orbiscindens|Holdemania filiformis|Clostridium orbiscindens|Kingella oralis|Clostridium orbiscindens|Klebsiella pneumoniae|Clostridium orbiscindens|Klebsiella varicola|Clostridium orbiscindens|Lachnospiraceae bacterium 5_1_57FAA|Clostridium orbiscindens|Lactobacillus acidophilus|Clostridium orbiscindens|Lactobacillus amylovorus|Clostridium orbiscindens|Lactobacillus brevis|Clostridium orbiscindens|Lactobacillus casei|Clostridium orbiscindens|Lactobacillus crispatus|Clostridium orbiscindens|Lactobacillus delbrueckii|Clostridium orbiscindens|Lactobacillus fermentum|Clostridium orbiscindens|Lactobacillus gasseri|Clostridium orbiscindens|Lactobacillus iners|Clostridium orbiscindens|Lactobacillus jensenii|Clostridium orbiscindens|Lactobacillus johnsonii|Clostridium orbiscindens|Lactobacillus paracasei|Clostridium orbiscindens|Lactobacillus plantarum|Clostridium orbiscindens|Lactobacillus reuteri|Clostridium orbiscindens|Lactobacillus rhamnosus|Clostridium orbiscindens|Lactobacillus ruminis|Clostridium orbiscindens|Lactobacillus sakei|Clostridium orbiscindens|Lactobacillus salivarius|Clostridium orbiscindens|Lactococcus lactis|Clostridium orbiscindens|Lautropia mirabilis|Clostridium orbiscindens|Leuconostoc citreum|Clostridium orbiscindens|Leuconostoc gasicomitatum|Clostridium orbiscindens|Leuconostoc mesenteroides|Clostridium orbiscindens|Listeria monocytogenes|Clostridium orbiscindens|Marvinbryantia formatexigens|Clostridium orbiscindens|Megasphaera hypermegale|Clostridium orbiscindens|Megasphaera micronuciformis|Clostridium orbiscindens|Methanobrevibacter smithii|Clostridium orbiscindens|Methanospaera stadtmanae|Clostridium orbiscindens|Methylobacterium radiotolerans|Clostridium orbiscindens|Mitsuokella multacida|Clostridium orbiscindens|Mobiluncus curtisii|Clostridium orbiscindens|Mycoplasma hominis|Clostridium orbiscindens|Neisseria mucosa|Clostridium orbiscindens|Odoribacter splanchnicus|Clostridium orbiscindens|Olsenella uli|Clostridium orbiscindens|Oribacterium sinus|Clostridium orbiscindens|Oxalobacter formigenes|Clostridium orbiscindens|Parabacteroides distasonis|Clostridium orbiscindens|Parabacteroides johnsonii|Clostridium orbiscindens|Parabacteroides merdae|Clostridium orbiscindens|Parvimonas micra|Clostridium orbiscindens|Pediococcus acidilactici|Clostridium orbiscindens|Pediococcus pentosaceus|Clostridium orbiscindens|Peptoniphilus duerdenii|Clostridium orbiscindens|Peptoniphilus harei|Clostridium orbiscindens|Peptoniphilus lacrimalis|Clostridium orbiscindens|Peptostreptococcus anaerobius|Clostridium orbiscindens|Peptostreptococcus stomatis|Clostridium orbiscindens|Porphyromonas asaccharolytica|Clostridium orbiscindens|Porphyromonas uenonis|Clostridium orbiscindens|Prevotella amnii|Clostridium orbiscindens|Prevotella bergensis|Clostridium orbiscindens|Prevotella bivia|Clostridium orbiscindens|Prevotella buccae|Clostridium orbiscindens|Prevotella buccalis|Clostridium orbiscindens|Prevotella copri|Clostridium orbiscindens|Prevotella disiens|Clostridium orbiscindens|Prevotella melaninogenica|Clostridium orbiscindens|Prevotella multiformis|Clostridium orbiscindens|Prevotella oralis|Clostridium orbiscindens|Prevotella oris|Clostridium orbiscindens|Prevotella salivae|Clostridium orbiscindens|Prevotella timonensis|Clostridium orbiscindens|Propionibacterium acnes|Clostridium orbiscindens|Propionibacterium freudenreichii|Clostridium orbiscindens|Propionibacterium penneri|Clostridium orbiscindens|Pseudoflavonifractor capillosus|Clostridium orbiscindens|Pseudomonas aeruginosa|Clostridium orbiscindens|Pseudomonas fluorescens|Clostridium

147

saccharolyticum,Staphylococcus epidermidis|Clostridium saccharolyticum,Staphylococcus hominis|Clostridium saccharolyticum,Staphylococcus saprophyticus|Clostridium saccharolyticum,Staphylococcus warneri|Clostridium saccharolyticum,Streptococcus agalactiae|Clostridium saccharolyticum,Streptococcus anginosus|Clostridium saccharolyticum,Streptococcus australis|Clostridium saccharolyticum,Streptococcus bovis|Clostridium saccharolyticum,Streptococcus cristatus|Clostridium saccharolyticum,Streptococcus dysgalactiae|Clostridium saccharolyticum,Streptococcus equinus|Clostridium saccharolyticum,Streptococcus gordonii|Clostridium saccharolyticum,Streptococcus infantarius|Clostridium saccharolyticum,Streptococcus infantis|Clostridium saccharolyticum,Streptococcus mitis|Clostridium saccharolyticum,Streptococcus mutans|Clostridium saccharolyticum,Streptococcus oralis|Clostridium saccharolyticum,Streptococcus parasanguinis|Clostridium saccharolyticum,Streptococcus peroris|Clostridium saccharolyticum,Streptococcus pneumoniae|Clostridium saccharolyticum,Streptococcus salivarius|Clostridium saccharolyticum,Streptococcus sanguinis|Clostridium saccharolyticum,Streptococcus thermophilus|Clostridium saccharolyticum,Streptococcus vestibularis|Clostridium saccharolyticum,Subdoligranulum variable|Clostridium saccharolyticum,Succinatimonas hippei|Clostridium saccharolyticum,Sutterella wadsworthensis|Clostridium saccharolyticum,Tropheryma whipplei|Clostridium saccharolyticum,Veillonella atypica|Clostridium saccharolyticum,Veillonella dispar|Clostridium saccharolyticum,Veillonella parvula|Clostridium saccharolyticum,Victivallis vadensis|Clostridium scindens,Clostridium scindens|Clostridium scindens,Clostridium symbiosum|Clostridium scindens,Clostridium tertium|Clostridium scindens,Collinsella aerofaciens|Clostridium scindens,Collinsella intestinalis|Clostridium scindens,Collinsella stercoris|Clostridium scindens,Coprobacillus sp. D7|Clostridium scindens,Coprococcus catus|Clostridium scindens,Coprococcus comes|Clostridium scindens,Coprococcus eutactus|Clostridium scindens,Corynebacterium aurimucosum|Clostridium scindens,Corynebacterium matruchotii|Clostridium scindens,Cryptobacterium curtum|Clostridium scindens,Desulfovibrio desulfuricans|Clostridium scindens,Desulfovibrio piger|Clostridium scindens,Dialister invisus|Clostridium scindens,Dialister microaerophilus|Clostridium scindens,Dorea formicigenerans|Clostridium scindens,Dorea longicatena|Clostridium scindens,Eggerthella lenta|Clostridium scindens,Eikenella corrodens|Clostridium scindens,Enterobacter cancerogenus|Clostridium scindens,Enterobacter cloacae|Clostridium scindens,Enterococcus faecalis|Clostridium scindens,Enterococcus faecium|Clostridium scindens,Enterococcus gallinarum|Clostridium scindens,Erysipelotrichaceae bacterium 3_1_53|Clostridium scindens,Escherichia coli|Clostridium scindens,Escherichia fergusonii|Clostridium scindens,Ethanoligenens harbinense|Clostridium scindens,Eubacterium cellulosolvens|Clostridium scindens,Eubacterium eligens|Clostridium scindens,Eubacterium hallii|Clostridium scindens,Eubacterium limosum|Clostridium scindens,Eubacterium rectale|Clostridium scindens,Eubacterium siraeum|Clostridium scindens,Eubacterium ventriosum|Clostridium scindens,Faecalibacterium prausnitzii|Clostridium scindens,Finegoldia magna|Clostridium scindens,Fusobacterium gonidiaformans|Clostridium scindens,Fusobacterium mortiferum|Clostridium scindens,Fusobacterium nucleatum|Clostridium scindens,Fusobacterium varium|Clostridium scindens,Gardnerella vaginalis|Clostridium scindens,Gemella haemolysans|Clostridium scindens,Gemella morbillorum|Clostridium scindens,Gordoniabacter pamelaeae|Clostridium scindens,Granulicatella adiacens|Clostridium scindens,Granulicatella elegans|Clostridium scindens,Haemophilus influenzae|Clostridium scindens,Haemophilus parainfluenzae|Clostridium scindens,Helicobacter pullorum|Clostridium scindens,Helicobacter pylori|Clostridium scindens,Holdemania filiformis|Clostridium scindens,Kingella oralis|Clostridium scindens,Klebsiella pneumoniae|Clostridium scindens,Klebsiella variicola|Clostridium scindens,Lachnospiraceae bacterium 5_1_57FAA|Clostridium scindens,Lactobacillus acidophilus|Clostridium scindens,Lactobacillus amylovorus|Clostridium scindens,Lactobacillus brevis|Clostridium scindens,Lactobacillus casei|Clostridium scindens,Lactobacillus crispatus|Clostridium scindens,Lactobacillus delbrueckii|Clostridium scindens,Lactobacillus fermentum|Clostridium scindens,Lactobacillus gasseri|Clostridium scindens,Lactobacillus iners|Clostridium scindens,Lactobacillus jensenii|Clostridium scindens,Lactobacillus johnsonii|Clostridium scindens,Lactobacillus paracasei|Clostridium scindens,Lactobacillus plantarum|Clostridium scindens,Lactobacillus reuteri|Clostridium scindens,Lactobacillus rhamnosus|Clostridium scindens,Lactobacillus ruminis|Clostridium scindens,Lactobacillus sakei|Clostridium scindens,Lactobacillus salivarius|Clostridium scindens,Lactococcus lactis|Clostridium scindens,Lautropia mirabilis|Clostridium scindens,Leuconostoc citreum|Clostridium scindens,Leuconostoc gasiconitatum|Clostridium scindens,Leuconostoc mesenteroides|Clostridium scindens,Listeria monocytogenes|Clostridium scindens,Marvinbryantia formatexigens|Clostridium scindens,Megamonas hypermegale|Clostridium scindens,Megasphaera micronuformis|Clostridium scindens,Methanobrevibacter smithii|Clostridium scindens,Methanospaera stadtmannae|Clostridium scindens,Methylobacterium radiotolerans|Clostridium scindens,Mitsuokella multacida|Clostridium scindens,Mobiluncus curtisii|Clostridium scindens,Mycoplasma hominis|Clostridium scindens,Neisseria mucosa|Clostridium scindens,Nodibacter splanchnicus|Clostridium scindens,Olsenella uli|Clostridium scindens,Oribacterium sinus|Clostridium scindens,Oxalobacter formigenes|Clostridium scindens,Parabacteroides distasonis|Clostridium scindens,Parabacteroides johnsonii|Clostridium scindens,Parabacteroides merdae|Clostridium scindens,Parvimonas micra|Clostridium scindens,Pediococcus acidilactici|Clostridium scindens,Pediococcus pentosaceus|Clostridium scindens,Peptoniphilus duerdenii|Clostridium scindens,Peptoniphilus harei|Clostridium scindens,Peptoniphilus lacrimalis|Clostridium scindens,Peptostreptococcus anaerobius|Clostridium scindens,Peptostreptococcus stomatis|Clostridium scindens,Porphyromonas asaccharolytica|Clostridium scindens,Porphyromonas uenonis|Clostridium scindens,Prevotella amnii|Clostridium scindens,Prevotella bergensis|Clostridium scindens,Prevotella bivia|Clostridium scindens,Prevotella buccae|Clostridium scindens,Prevotella buccalis|Clostridium scindens,Prevotella copri|Clostridium scindens,Prevotella disiens|Clostridium scindens,Prevotella melaninogenica|Clostridium scindens,Prevotella multiformis|Clostridium scindens,Prevotella oralis|Clostridium scindens,Prevotella oris|Clostridium scindens,Prevotella salivae|Clostridium scindens,Prevotella timonensis|Clostridium scindens,Propionibacterium acnes|Clostridium scindens,Propionibacterium freudenreichii|Clostridium scindens,Proteus mirabilis|Clostridium scindens,Proteus penneri|Clostridium scindens,Pseudoflavonifractor capillosus|Clostridium scindens,Pseudomonas aeruginosa|Clostridium scindens,Pseudomonas fluorescens|Clostridium scindens,Pseudomonas putida|Clostridium scindens,Pseudoramibacter alactolyticus|Clostridium scindens,Pyramidobacter piscolens|Clostridium scindens,Rhodopseudomonas palustris|Clostridium scindens,Roseburia intestinalis|Clostridium scindens,Roseburia inulinivorans|Clostridium scindens,Rothia dentocariosa|Clostridium scindens,Rothia mucilaginosa|Clostridium scindens,Ruminococcus albus|Clostridium scindens,Ruminococcus bromii|Clostridium scindens,Ruminococcus gnavus|Clostridium scindens,Ruminococcus lactaris|Clostridium scindens,Ruminococcus obeum|Clostridium scindens,Ruminococcus torques|Clostridium scindens,Selenomonas sputigena|Clostridium scindens,Shigella boydii|Clostridium scindens,Shigella dysenteriae|Clostridium scindens,Shigella sonnei|Clostridium scindens,Slackia exigua|Clostridium scindens,Solobacterium moorei|Clostridium scindens,Staphylococcus aureus|Clostridium scindens,Staphylococcus epidermidis|Clostridium scindens,Staphylococcus hominis|Clostridium scindens,Staphylococcus saprophyticus|Clostridium scindens,Staphylococcus warneri|Clostridium scindens,Streptococcus agalactiae|Clostridium scindens,Streptococcus anginosus|Clostridium scindens,Streptococcus australis|Clostridium scindens,Streptococcus bovis|Clostridium scindens,Streptococcus cristatus|Clostridium scindens,Streptococcus dysgalactiae|Clostridium scindens,Streptococcus equinus|Clostridium scindens,Streptococcus gordonii|Clostridium scindens,Streptococcus infantarius|Clostridium scindens,Streptococcus infantis|Clostridium scindens,Streptococcus mitis|Clostridium scindens,Streptococcus mutans|Clostridium scindens,Streptococcus oralis|Clostridium scindens,Streptococcus parasanguinis|Clostridium scindens,Streptococcus peroris|Clostridium scindens,Streptococcus pneumoniae|Clostridium scindens,Streptococcus salivarius|Clostridium scindens,Streptococcus sanguinis|Clostridium scindens,Streptococcus thermophilus|Clostridium scindens,Streptococcus vestibularis|Clostridium scindens,Subdoligranulum variable|Clostridium scindens,Succinatimonas hippei|Clostridium scindens,Sutterella wadsworthensis|Clostridium scindens,Tropheryma whipplei|Clostridium scindens,Veillonella atypica|Clostridium scindens,Veillonella dispar|Clostridium scindens,Veillonella parvula|Clostridium scindens,Victivallis vadensis|Clostridium symbiosum,Clostridium symbiosum|Clostridium tertium|Clostridium symbiosum,Collinsella aerofaciens|Clostridium symbiosum,Collinsella intestinalis|Clostridium symbiosum,Collinsella stercoris|Clostridium symbiosum,Coprobacillus sp. D7|Clostridium symbiosum,Coprococcus catus|Clostridium symbiosum,Coprococcus comes|Clostridium symbiosum,Coprococcus eutactus|Clostridium symbiosum,Corynebacterium aurimucosum|Clostridium symbiosum,Corynebacterium matruchotii|Clostridium symbiosum,Cryptobacterium curtum|Clostridium symbiosum,Desulfovibrio desulfuricans|Clostridium symbiosum,Desulfovibrio piger|Clostridium symbiosum,Dialister invisus|Clostridium symbiosum,Dialister microaerophilus|Clostridium symbiosum,Dorea formicigenerans|Clostridium symbiosum,Dorea longicatena|Clostridium symbiosum,Eggerthella lenta|Clostridium symbiosum,Eikenella corrodens|Clostridium symbiosum,Enterobacter cancerogenus|Clostridium symbiosum,Enterobacter cloacae|Clostridium symbiosum,Enterococcus faecalis|Clostridium symbiosum,Enterococcus faecium|Clostridium symbiosum,Enterococcus gallinarum|Clostridium symbiosum,Erysipelotrichaceae bacterium 3_1_53|Clostridium symbiosum,Escherichia coli|Clostridium symbiosum,Escherichia fergusonii|Clostridium symbiosum,Ethanoligenens harbinense|Clostridium symbiosum,Eubacterium cellulosolvens|Clostridium symbiosum,Eubacterium eligens|Clostridium symbiosum,Eubacterium hallii|Clostridium symbiosum,Eubacterium limosum|Clostridium symbiosum,Eubacterium rectale|Clostridium symbiosum,Eubacterium siraeum|Clostridium symbiosum,Eubacterium ventriosum|Clostridium symbiosum,Faecalibacterium prausnitzii|Clostridium symbiosum,Finegoldia magna|Clostridium symbiosum,Fusobacterium gonidiaformans|Clostridium symbiosum,Fusobacterium mortiferum|Clostridium symbiosum,Fusobacterium nucleatum|Clostridium symbiosum,Fusobacterium varium|Clostridium symbiosum,Gardnerella vaginalis|Clostridium symbiosum,Gemella haemolysans|Clostridium symbiosum,Gemella morbillorum|Clostridium symbiosum,Gordoniabacter pamelaeae|Clostridium symbiosum,Granulicatella adiacens|Clostridium symbiosum,Granulicatella elegans|Clostridium symbiosum,Haemophilus influenzae|Clostridium symbiosum,Haemophilus parainfluenzae|Clostridium symbiosum,Helicobacter pullorum|Clostridium symbiosum,Helicobacter pylori|Clostridium symbiosum,Holdemania filiformis|Clostridium symbiosum,Kingella oralis|Clostridium symbiosum,Klebsiella pneumoniae|Clostridium symbiosum,Klebsiella variicola|Clostridium symbiosum,Lachnospiraceae bacterium 5_1_57FAA|Clostridium symbiosum,Lactobacillus acidophilus|Clostridium symbiosum,Lactobacillus amylovorus|Clostridium symbiosum,Lactobacillus brevis|Clostridium symbiosum,Lactobacillus casei|Clostridium symbiosum,Lactobacillus crispatus|Clostridium symbiosum,Lactobacillus delbrueckii|Clostridium symbiosum,Lactobacillus fermentum|Clostridium symbiosum,Lactobacillus gasseri|Clostridium symbiosum,Lactobacillus iners|Clostridium symbiosum,Lactobacillus jensenii|Clostridium symbiosum,Lactobacillus johnsonii|Clostridium symbiosum,Lactobacillus paracasei|Clostridium symbiosum,Lactobacillus plantarum|Clostridium symbiosum,Lactobacillus reuteri|Clostridium symbiosum,Lactobacillus rhamnosus|Clostridium symbiosum,Lactobacillus ruminis|Clostridium symbiosum,Lactobacillus sakei|Clostridium symbiosum,Lactobacillus salivarius|Clostridium symbiosum,Lactococcus lactis|Clostridium symbiosum,Lautropia mirabilis|Clostridium symbiosum,Leuconostoc citreum|Clostridium symbiosum,Leuconostoc gasiconitatum|Clostridium symbiosum,Leuconostoc mesenteroides|Clostridium symbiosum,Listeria monocytogenes|Clostridium symbiosum,Marvinbryantia formatexigens|Clostridium symbiosum,Megamonas hypermegale|Clostridium symbiosum,Megasphaera micronuformis|Clostridium symbiosum,Methanobrevibacter smithii|Clostridium symbiosum,Methanospaera stadtmannae|Clostridium symbiosum,Methylobacterium radiotolerans|Clostridium symbiosum,Mitsuokella multacida|Clostridium symbiosum,Mobiluncus curtisii|Clostridium symbiosum,Mycoplasma hominis|Clostridium symbiosum,Neisseria mucosa|Clostridium symbiosum,Nodibacter splanchnicus|Clostridium symbiosum,Olsenella uli|Clostridium symbiosum,Oribacterium sinus|Clostridium symbiosum,Oxalobacter formigenes|Clostridium symbiosum,Parabacteroides distasonis|Clostridium symbiosum,Parabacteroides johnsonii|Clostridium symbiosum,Parabacteroides merdae|Clostridium symbiosum,Parvimonas micra|Clostridium symbiosum,Pediococcus acidilactici|Clostridium symbiosum,Pediococcus pentosaceus|Clostridium symbiosum,Peptoniphilus duerdenii|Clostridium symbiosum,Peptoniphilus harei|Clostridium symbiosum,Peptoniphilus lacrimalis|Clostridium symbiosum,Peptostreptococcus anaerobius|Clostridium symbiosum,Peptostreptococcus stomatis|Clostridium symbiosum,Porphyromonas asaccharolytica|Clostridium symbiosum,Porphyromonas uenonis|Clostridium symbiosum,Prevotella amnii|Clostridium symbiosum,Prevotella bergensis|Clostridium symbiosum,Prevotella bivia|Clostridium symbiosum,Prevotella buccae|Clostridium symbiosum,Prevotella buccalis|Clostridium symbiosum,Prevotella copri|Clostridium symbiosum,Prevotella disiens|Clostridium symbiosum,Prevotella melaninogenica|Clostridium symbiosum,Prevotella multiformis|Clostridium symbiosum,Prevotella oralis|Clostridium symbiosum,Prevotella oris|Clostridium symbiosum,Prevotella salivae|Clostridium symbiosum,Prevotella timonensis|Clostridium symbiosum,Propionibacterium acnes|Clostridium symbiosum,Propionibacterium freudenreichii|Clostridium symbiosum,Proteus mirabilis|Clostridium symbiosum,Proteus penneri|Clostridium symbiosum,Pseudoflavonifractor capillosus|Clostridium symbiosum,Pseudomonas aeruginosa|Clostridium symbiosum,Pseudomonas fluorescens|Clostridium symbiosum,Pseudomonas putida|Clostridium symbiosum,Pseudoramibacter alactolyticus|Clostridium symbiosum,Pyramidobacter piscolens|Clostridium symbiosum,Rhodopseudomonas palustris|Clostridium symbiosum,Roseburia intestinalis|Clostridium symbiosum,Roseburia inulinivorans|Clostridium symbiosum,Rothia dentocariosa|Clostridium symbiosum,Rothia mucilaginosa|Clostridium symbiosum,Ruminococcus albus|Clostridium symbiosum,Ruminococcus bromii|Clostridium symbiosum,Ruminococcus gnavus|Clostridium symbiosum,Ruminococcus lactaris|Clostridium symbiosum,Ruminococcus obeum|Clostridium symbiosum,Ruminococcus torques|Clostridium symbiosum,Selenomonas sputigena|Clostridium symbiosum,Shigella boydii|Clostridium symbiosum,Shigella dysenteriae|Clostridium symbiosum,Shigella sonnei|Clostridium symbiosum,Slackia exigua|Clostridium symbiosum,Solobacterium moorei|Clostridium symbiosum,Staphylococcus aureus|Clostridium symbiosum,Staphylococcus epidermidis|Clostridium symbiosum,Staphylococcus hominis|Clostridium symbiosum,Staphylococcus saprophyticus|Clostridium symbiosum,Staphylococcus warneri|Clostridium symbiosum,Streptococcus agalactiae|Clostridium symbiosum,Streptococcus anginosus|Clostridium symbiosum,Streptococcus australis|Clostridium symbiosum,Streptococcus bovis|Clostridium symbiosum,Streptococcus cristatus|Clostridium symbiosum,Streptococcus dysgalactiae|Clostridium symbiosum,Streptococcus equinus|Clostridium symbiosum,Streptococcus gordonii|Clostridium symbiosum,Streptococcus infantarius|Clostridium symbiosum,Streptococcus infantis|Clostridium symbiosum,Streptococcus mitis|Clostridium symbiosum,Streptococcus mutans|Clostridium symbiosum,Streptococcus oralis|Clostridium symbiosum,Streptococcus parasanguinis|Clostridium symbiosum,Streptococcus peroris|Clostridium symbiosum,Streptococcus pneumoniae|Clostridium symbiosum,Streptococcus salivarius|Clostridium symbiosum,Streptococcus sanguinis|Clostridium symbiosum,Streptococcus thermophilus|Clostridium symbiosum,Streptococcus vestibularis|Clostridium symbiosum,Subdoligranulum variable|Clostridium symbiosum,Succinatimonas hippei|Clostridium symbiosum,Sutterella wadsworthensis|Clostridium symbiosum,Tropheryma whipplei|Clostridium symbiosum,Veillonella atypica|Clostridium symbiosum,Veillonella dispar|Clostridium symbiosum,Veillonella parvula|Clostridium symbiosum,Victivallis vadensis|Clostridium tertium,Clostridium tertium|Clostridium tertium,Collinsella aerofaciens|Clostridium tertium,Collinsella intestinalis|Clostridium tertium,Collinsella stercoris|Clostridium tertium,Coprobacillus sp. D7|Clostridium tertium,Coprococcus catus|Clostridium tertium,Coprococcus comes|Clostridium tertium,Coprococcus eutactus|Clostridium tertium,Corynebacterium aurimucosum|Clostridium tertium,Corynebacterium matruchotii|Clostridium tertium,Cryptobacterium curtum|Clostridium tertium,Desulfovibrio desulfuricans|Clostridium tertium,Desulfovibrio piger|Clostridium tertium,Dialister invisus|Clostridium tertium,Dialister microaerophilus|Clostridium tertium,Dorea formicigenerans|Clostridium tertium,Dorea longicatena|Clostridium tertium,Eggerthella lenta|Clostridium tertium,Eikenella corrodens|Clostridium tertium,Enterobacter cancerogenus|Clostridium tertium,Enterobacter cloacae|Clostridium tertium,Enterococcus

149

150

151

152

153

wadsworthensis|Desulfovibrio desulfuricans,Tropheryma whipplei|Desulfovibrio desulfuricans,Veillonella atypica|Desulfovibrio desulfuricans,Veillonella dispar|Desulfovibrio desulfuricans,Veillonella parvula|Desulfovibrio desulfuricans,Victivallis vadensis|Desulfovibrio piger,Desulfovibrio piger|Desulfovibrio piger,Dialister invisus|Desulfovibrio piger,Dialister microaerophilus|Desulfovibrio piger,Dorea formicigenerans|Desulfovibrio piger,Dorea longicatena|Desulfovibrio piger,Eggerthella lenta|Desulfovibrio piger,Eikenella corrodens|Desulfovibrio piger,Enterobacter cancerogenus|Desulfovibrio piger,Enterobacter cloacae|Desulfovibrio piger,Enterococcus faecalis|Desulfovibrio piger,Enterococcus faecium|Desulfovibrio piger,Enterococcus gallinarum|Desulfovibrio piger,Erysipelotrichaceae bacterium 3_1_53|Desulfovibrio piger,Escherichia coli|Desulfovibrio piger,Escherichia fergusonii|Desulfovibrio piger,Ethanoligenens harbinense|Desulfovibrio piger,Eubacterium cellulosolvens|Desulfovibrio piger,Eubacterium eligens|Desulfovibrio piger,Eubacterium hallii|Desulfovibrio piger,Eubacterium limosum|Desulfovibrio piger,Eubacterium rectale|Desulfovibrio piger,Eubacterium siraeum|Desulfovibrio piger,Eubacterium ventriosum|Desulfovibrio piger,Faecalibacterium prausnitzii|Desulfovibrio piger,Finegoldia magna|Desulfovibrio piger,Fusobacterium gonidiaformans|Desulfovibrio piger,Fusobacterium mortiferum|Desulfovibrio piger,Fusobacterium nucleatum|Desulfovibrio piger,Fusobacterium varium|Desulfovibrio piger,Gardnerella vaginalis|Desulfovibrio piger,Gemella haemolysans|Desulfovibrio piger,Gemella morbillorum|Desulfovibrio piger,Gordonibacter pamelaiae|Desulfovibrio piger,Granulicatella adiacens|Desulfovibrio piger,Granulicatella elegans|Desulfovibrio piger,Haemophilus influenzae|Desulfovibrio piger,Haemophilus parainfluenzae|Desulfovibrio piger,Helicobacter pullorum|Desulfovibrio piger,Helicobacter pylori|Desulfovibrio piger,Holdemania filiformis|Desulfovibrio piger,Kingella oralis|Desulfovibrio piger,Klebsiella pneumoniae|Desulfovibrio piger,Klebsiella variicola|Desulfovibrio piger,Lachnospiraceae bacterium 5_1_57FAA|Desulfovibrio piger,Lactobacillus acidophilus|Desulfovibrio piger,Lactobacillus amylovorus|Desulfovibrio piger,Lactobacillus brevis|Desulfovibrio piger,Lactobacillus casei|Desulfovibrio piger,Lactobacillus crispatus|Desulfovibrio piger,Lactobacillus delbrueckii|Desulfovibrio piger,Lactobacillus fermentum|Desulfovibrio piger,Lactobacillus gasseri|Desulfovibrio piger,Lactobacillus iners|Desulfovibrio piger,Lactobacillus jensenii|Desulfovibrio piger,Lactobacillus johnsonii|Desulfovibrio piger,Lactobacillus paracasei|Desulfovibrio piger,Lactobacillus plantarum|Desulfovibrio piger,Lactobacillus reuteri|Desulfovibrio piger,Lactobacillus rhamnosus|Desulfovibrio piger,Lactobacillus ruminis|Desulfovibrio piger,Lactobacillus sakei|Desulfovibrio piger,Lactobacillus salivarius|Desulfovibrio piger,Lactococcus lactis|Desulfovibrio piger,Lautropia mirabilis|Desulfovibrio piger,Leuconostoc citreum|Desulfovibrio piger,Leuconostoc mesenteroides|Desulfovibrio piger,Listeria monocytogenes|Desulfovibrio piger,Marvinbryantia formatexigens|Desulfovibrio piger,Megamonas hypermegale|Desulfovibrio piger,Megasphaera micronuciformis|Desulfovibrio piger,Methanobrevibacter smithii|Desulfovibrio piger,Methanospaera stadtmannae|Desulfovibrio piger,Methylobacterium radiotolerans|Desulfovibrio piger,Mitsuokella multicaida|Desulfovibrio piger,Mobiluncus curtisii|Desulfovibrio piger,Mycoplasma hominis|Desulfovibrio piger,Neisseria mucosa|Desulfovibrio piger,Odoribacter splanchnicus|Desulfovibrio piger,Olsenella ulii|Desulfovibrio piger,Oribacterium sinus|Desulfovibrio piger,Oxalobacter formigenes|Desulfovibrio piger,Parabacteroides distasonis|Desulfovibrio piger,Parabacteroides johnsonii|Desulfovibrio piger,Parabacteroides merdae|Desulfovibrio piger,Parvimonas micra|Desulfovibrio piger,Pediococcus acidilactici|Desulfovibrio piger,Pediococcus pentosaceus|Desulfovibrio piger,Peptoniphilus duerdenii|Desulfovibrio piger,Peptoniphilus harei|Desulfovibrio piger,Peptoniphilus lacrimalis|Desulfovibrio piger,Peptostreptococcus anaerobius|Desulfovibrio piger,Peptostreptococcus stomatis|Desulfovibrio piger,Porphyromonas asaccharolytica|Desulfovibrio piger,Porphyromonas uenonis|Desulfovibrio piger,Prevotella amnii|Desulfovibrio piger,Prevotella bergensis|Desulfovibrio piger,Prevotella bivia|Desulfovibrio piger,Prevotella buccae|Desulfovibrio piger,Prevotella buccalis|Desulfovibrio piger,Prevotella copri|Desulfovibrio piger,Prevotella disiens|Desulfovibrio piger,Prevotella melaninogenica|Desulfovibrio piger,Prevotella multiformis|Desulfovibrio piger,Prevotella oralis|Desulfovibrio piger,Prevotella oris|Desulfovibrio piger,Prevotella salivae|Desulfovibrio piger,Prevotella timonensis|Desulfovibrio piger,Propionibacterium acnes|Desulfovibrio piger,Propionibacterium freudenreichii|Desulfovibrio piger,Proteus mirabilis|Desulfovibrio piger,Proteus penneri|Desulfovibrio piger,Pseudoflavonifractor capillosus|Desulfovibrio piger,Pseudomonas aeruginosa|Desulfovibrio piger,Pseudomonas fluorescens|Desulfovibrio piger,Pseudomonas putida|Desulfovibrio piger,Pseudoramibacter alactolyticus|Desulfovibrio piger,Pyramidobacter piscolens|Desulfovibrio piger,Rhodospseudomonas palustris|Desulfovibrio piger,Roseburia inulinivorans|Desulfovibrio piger,Rothia dentocariosa|Desulfovibrio piger,Rothia mucilaginosa|Desulfovibrio piger,Ruminococcus albus|Desulfovibrio piger,Ruminococcus bromii|Desulfovibrio piger,Ruminococcus gnavus|Desulfovibrio piger,Ruminococcus lactaris|Desulfovibrio piger,Ruminococcus oboem|Desulfovibrio piger,Ruminococcus torques|Desulfovibrio piger,Selenomonas spuitigena|Desulfovibrio piger,Shigella boydii|Desulfovibrio piger,Shigella dysenteriae|Desulfovibrio piger,Shigella sonnei|Desulfovibrio piger,Slackia exigua|Desulfovibrio piger,Solobacterium moorei|Desulfovibrio piger,Staphylococcus aureus|Desulfovibrio piger,Staphylococcus epidermidis|Desulfovibrio piger,Staphylococcus hominis|Desulfovibrio piger,Staphylococcus saprophyticus|Desulfovibrio piger,Staphylococcus warneri|Desulfovibrio piger,Streptococcus agalactiae|Desulfovibrio piger,Streptococcus anginosus|Desulfovibrio piger,Streptococcus australis|Desulfovibrio piger,Streptococcus bovis|Desulfovibrio piger,Streptococcus cristatus|Desulfovibrio piger,Streptococcus dysgalactiae|Desulfovibrio piger,Streptococcus equinus|Desulfovibrio piger,Streptococcus gordonii|Desulfovibrio piger,Streptococcus infantarius|Desulfovibrio piger,Streptococcus infantilis|Desulfovibrio piger,Streptococcus mitis|Desulfovibrio piger,Streptococcus mutans|Desulfovibrio piger,Streptococcus oralis|Desulfovibrio piger,Streptococcus parasanguinis|Desulfovibrio piger,Streptococcus peroris|Desulfovibrio piger,Streptococcus pneumoniae|Desulfovibrio piger,Streptococcus salivarius|Desulfovibrio piger,Streptococcus sanguinis|Desulfovibrio piger,Streptococcus thermophilus|Desulfovibrio piger,Streptococcus vestibularis|Desulfovibrio piger,Subdoligranulum variable|Desulfovibrio piger,Succinatimonas hippei|Desulfovibrio piger,Sutterella wadsworthensis|Desulfovibrio piger,Tropheryma whipplei|Desulfovibrio piger,Veillonella atypica|Desulfovibrio piger,Veillonella dispar|Desulfovibrio piger,Veillonella parvula|Desulfovibrio piger,Victivallis vadensis|Dialister invisus,Dialister invisus,Dialister microaerophilus|Dialister invisus,Dorea formicigenerans|Dialister invisus,Dorea longicatena|Dialister invisus,Eggerthella lenta|Dialister invisus,Eikenella corrodens|Dialister invisus,Enterobacter cancerogenus|Dialister invisus,Enterobacter cloacae|Dialister invisus,Enterococcus faecalis|Dialister invisus,Enterococcus faecium|Dialister invisus,Enterococcus gallinarum|Dialister invisus,Erysipelotrichaceae bacterium 3_1_53|Dialister invisus,Escherichia coli|Dialister invisus,Escherichia fergusonii|Dialister invisus,Ethanoligenens harbinense|Dialister invisus,Eubacterium cellulosolvens|Dialister invisus,Eubacterium eligens|Dialister invisus,Eubacterium hallii|Dialister invisus,Eubacterium limosum|Dialister invisus,Eubacterium rectale|Dialister invisus,Eubacterium siraeum|Dialister invisus,Eubacterium ventriosum|Dialister invisus,Faecalibacterium prausnitzii|Dialister invisus,Finegoldia magna|Dialister invisus,Fusobacterium gonidiaformans|Dialister invisus,Fusobacterium mortiferum|Dialister invisus,Fusobacterium nucleatum|Dialister invisus,Fusobacterium varium|Dialister invisus,Gardnerella vaginalis|Dialister invisus,Gemella haemolysans|Dialister invisus,Gemella morbillorum|Dialister invisus,Gordonibacter pamelaiae|Dialister invisus,Granulicatella adiacens|Dialister invisus,Granulicatella elegans|Dialister invisus,Haemophilus influenzae|Dialister invisus,Haemophilus parainfluenzae|Dialister invisus,Helicobacter pullorum|Dialister invisus,Helicobacter pylori|Dialister invisus,Holdemania filiformis|Dialister invisus,Kingella oralis|Dialister invisus,Klebsiella pneumoniae|Dialister invisus,Klebsiella variicola|Dialister invisus,Lachnospiraceae bacterium 5_1_57FAA|Dialister invisus,Lactobacillus acidophilus|Dialister invisus,Lactobacillus amylovorus|Dialister invisus,Lactobacillus brevis|Dialister invisus,Lactobacillus casei|Dialister invisus,Lactobacillus crispatus|Dialister invisus,Lactobacillus delbrueckii|Dialister invisus,Lactobacillus fermentum|Dialister invisus,Lactobacillus gasseri|Dialister invisus,Lactobacillus iners|Dialister invisus,Lactobacillus jensenii|Dialister invisus,Lactobacillus johnsonii|Dialister invisus,Lactobacillus paracasei|Dialister invisus,Lactobacillus plantarum|Dialister invisus,Lactobacillus reuteri|Dialister invisus,Lactobacillus rhamnosus|Dialister invisus,Lactobacillus ruminis|Dialister invisus,Lactobacillus sakei|Dialister invisus,Lactobacillus salivarius|Dialister invisus,Lactococcus lactis|Dialister invisus,Lautropia mirabilis|Dialister invisus,Leuconostoc citreum|Dialister invisus,Leuconostoc gasicomitatum|Dialister invisus,Leuconostoc mesenteroides|Dialister invisus,Listeria monocytogenes|Dialister invisus,Marvinbryantia formatexigens|Dialister invisus,Megamonas hypermegale|Dialister invisus,Methanobrevibacter smithii|Dialister invisus,Methanospaera stadtmannae|Dialister invisus,Methylobacterium radiotolerans|Dialister invisus,Mitsuokella multicaida|Dialister invisus,Mobiluncus curtisii|Dialister invisus,Mycoplasma hominis|Dialister invisus,Neisseria mucosa|Dialister invisus,Odoribacter splanchnicus|Dialister invisus,Olsenella ulii|Dialister invisus,Oribacterium sinus|Dialister invisus,Oxalobacter formigenes|Dialister invisus,Parabacteroides distasonis|Dialister invisus,Parabacteroides johnsonii|Dialister invisus,Parabacteroides merdae|Dialister invisus,Parvimonas micra|Dialister invisus,Pediococcus acidilactici|Dialister invisus,Pediococcus pentosaceus|Dialister invisus,Peptoniphilus duerdenii|Dialister invisus,Peptoniphilus harei|Dialister invisus,Peptoniphilus lacrimalis|Dialister invisus,Peptostreptococcus anaerobius|Dialister invisus,Peptostreptococcus stomatis|Dialister invisus,Porphyromonas asaccharolytica|Dialister invisus,Porphyromonas uenonis|Dialister invisus,Prevotella amnii|Dialister invisus,Prevotella bergensis|Dialister invisus,Prevotella bivia|Dialister invisus,Prevotella buccae|Dialister invisus,Prevotella buccalis|Dialister invisus,Prevotella copri|Dialister invisus,Prevotella disiens|Dialister invisus,Prevotella melaninogenica|Dialister invisus,Prevotella multiformis|Dialister invisus,Prevotella oralis|Dialister invisus,Prevotella oris|Dialister invisus,Prevotella salivae|Dialister invisus,Prevotella timonensis|Dialister invisus,Propionibacterium acnes|Dialister invisus,Propionibacterium freudenreichii|Dialister invisus,Proteus mirabilis|Dialister invisus,Proteus penneri|Dialister invisus,Pseudoflavonifractor capillosus|Dialister invisus,Pseudomonas aeruginosa|Dialister invisus,Pseudomonas fluorescens|Dialister invisus,Pseudomonas putida|Dialister invisus,Pseudoramibacter alactolyticus|Dialister invisus,Pyramidobacter piscolens|Dialister invisus,Rhodospseudomonas palustris|Dialister invisus,Roseburia intestinalis|Dialister invisus,Roseburia inulinivorans|Dialister invisus,Rothia dentocariosa|Dialister invisus,Rothia mucilaginosa|Dialister invisus,Ruminococcus albus|Dialister invisus,Ruminococcus bromii|Dialister invisus,Ruminococcus gnavus|Dialister invisus,Ruminococcus lactaris|Dialister invisus,Ruminococcus oboem|Dialister invisus,Ruminococcus torques|Dialister invisus,Selenomonas spuitigena|Dialister invisus,Shigella boydii|Dialister invisus,Shigella dysenteriae|Dialister invisus,Shigella sonnei|Dialister invisus,Slackia exigua|Dialister invisus,Solobacterium moorei|Dialister invisus,Staphylococcus aureus|Dialister invisus,Staphylococcus epidermidis|Dialister invisus,Staphylococcus hominis|Dialister invisus,Staphylococcus saprophyticus|Dialister invisus,Staphylococcus warneri|Dialister invisus,Streptococcus agalactiae|Dialister invisus,Streptococcus anginosus|Dialister invisus,Streptococcus australis|Dialister invisus,Streptococcus bovis|Dialister invisus,Streptococcus cristatus|Dialister invisus,Streptococcus dysgalactiae|Dialister invisus,Streptococcus equinus|Dialister invisus,Streptococcus gordonii|Dialister invisus,Streptococcus infantarius|Dialister invisus,Streptococcus infantilis|Dialister invisus,Streptococcus mitis|Dialister invisus,Streptococcus mutans|Dialister invisus,Streptococcus oralis|Dialister invisus,Streptococcus parasanguinis|Dialister invisus,Streptococcus peroris|Dialister invisus,Streptococcus pneumoniae|Dialister invisus,Streptococcus salivarius|Dialister invisus,Streptococcus sanguinis|Dialister invisus,Streptococcus thermophilus|Dialister invisus,Streptococcus vestibularis|Dialister invisus,Subdoligranulum variable|Dialister invisus,Succinatimonas hippei|Dialister invisus,Sutterella wadsworthensis|Dialister invisus,Tropheryma whipplei|Dialister invisus,Veillonella atypica|Dialister invisus,Veillonella dispar|Dialister invisus,Veillonella parvula|Dialister invisus,Victivallis vadensis|Dialister microaerophilus,Dialister microaerophilus,Dialister microaerophilus,Dorea formicigenerans|Dialister microaerophilus,Dorea longicatena|Dialister microaerophilus,Eggerthella lenta|Dialister microaerophilus,Eikenella corrodens|Dialister microaerophilus,Enterobacter cancerogenus|Dialister microaerophilus,Enterobacter cloacae|Dialister microaerophilus,Enterococcus faecalis|Dialister microaerophilus,Enterococcus faecium|Dialister microaerophilus,Enterococcus gallinarum|Dialister microaerophilus,Erysipelotrichaceae bacterium 3_1_53|Dialister microaerophilus,Escherichia coli|Dialister microaerophilus,Escherichia fergusonii|Dialister microaerophilus,Ethanoligenens harbinense|Dialister microaerophilus,Eubacterium cellulosolvens|Dialister microaerophilus,Eubacterium eligens|Dialister microaerophilus,Eubacterium hallii|Dialister microaerophilus,Eubacterium limosum|Dialister microaerophilus,Eubacterium rectale|Dialister microaerophilus,Eubacterium siraeum|Dialister microaerophilus,Eubacterium ventriosum|Dialister microaerophilus,Faecalibacterium prausnitzii|Dialister microaerophilus,Finegoldia magna|Dialister microaerophilus,Fusobacterium gonidiaformans|Dialister microaerophilus,Fusobacterium mortiferum|Dialister microaerophilus,Fusobacterium nucleatum|Dialister microaerophilus,Fusobacterium varium|Dialister microaerophilus,Gardnerella vaginalis|Dialister microaerophilus,Gemella haemolysans|Dialister microaerophilus,Gemella morbillorum|Dialister microaerophilus,Gordonibacter pamelaiae|Dialister microaerophilus,Granulicatella adiacens|Dialister microaerophilus,Granulicatella elegans|Dialister microaerophilus,Haemophilus influenzae|Dialister microaerophilus,Haemophilus parainfluenzae|Dialister microaerophilus,Helicobacter pullorum|Dialister microaerophilus,Helicobacter pylori|Dialister microaerophilus,Holdemania filiformis|Dialister microaerophilus,Kingella oralis|Dialister microaerophilus,Klebsiella pneumoniae|Dialister microaerophilus,Klebsiella variicola|Dialister microaerophilus,Lachnospiraceae bacterium 5_1_57FAA|Dialister microaerophilus,Lactobacillus acidophilus|Dialister microaerophilus,Lactobacillus amylovorus|Dialister microaerophilus,Lactobacillus brevis|Dialister microaerophilus,Lactobacillus casei|Dialister microaerophilus,Lactobacillus crispatus|Dialister microaerophilus,Lactobacillus delbrueckii|Dialister microaerophilus,Lactobacillus fermentum|Dialister microaerophilus,Lactobacillus gasseri|Dialister microaerophilus,Lactobacillus iners|Dialister microaerophilus,Lactobacillus jensenii|Dialister microaerophilus,Lactobacillus johnsonii|Dialister microaerophilus,Lactobacillus paracasei|Dialister microaerophilus,Lactobacillus plantarum|Dialister microaerophilus,Lactobacillus reuteri|Dialister microaerophilus,Lactobacillus rhamnosus|Dialister microaerophilus,Lactobacillus ruminis|Dialister microaerophilus,Lactobacillus sakei|Dialister microaerophilus,Lactobacillus salivarius|Dialister microaerophilus,Lactococcus lactis|Dialister microaerophilus,Lautropia mirabilis|Dialister microaerophilus,Leuconostoc citreum|Dialister microaerophilus,Leuconostoc mesenteroides|Dialister microaerophilus,Listeria monocytogenes|Dialister microaerophilus,Marvinbryantia formatexigens|Dialister microaerophilus,Megamonas hypermegale|Dialister microaerophilus,Megasphaera micronuciformis|Dialister microaerophilus,Methanobrevibacter smithii|Dialister microaerophilus,Methanospaera stadtmannae|Dialister microaerophilus,Methylobacterium radiotolerans|Dialister microaerophilus,Mitsuokella multicaida|Dialister microaerophilus,Mobiluncus curtisii|Dialister microaerophilus,Mycoplasma hominis|Dialister microaerophilus,Neisseria mucosa|Dialister microaerophilus,Odoribacter splanchnicus|Dialister microaerophilus,Olsenella ulii|Dialister microaerophilus,Oribacterium sinus|Dialister microaerophilus,Oxalobacter formigenes|Dialister microaerophilus,Parabacteroides distasonis|Dialister microaerophilus,Parabacteroides johnsonii|Dialister microaerophilus,Parabacteroides merdae|Dialister microaerophilus,Parvimonas micra|Dialister microaerophilus,Pediococcus acidilactici|Dialister microaerophilus,Pediococcus pentosaceus|Dialister microaerophilus,Peptoniphilus duerdenii|Dialister microaerophilus,Peptoniphilus harei|Dialister microaerophilus,Peptoniphilus lacrimalis|Dialister microaerophilus,Peptostreptococcus anaerobius|Dialister microaerophilus,Peptostreptococcus stomatis|Dialister microaerophilus,Porphyromonas asaccharolytica|Dialister microaerophilus,Porphyromonas uenonis|Dialister microaerophilus,Prevotella amnii|Dialister microaerophilus,Prevotella bergensis|Dialister microaerophilus,Prevotella bivia|Dialister microaerophilus,Prevotella buccae|Dialister microaerophilus,Prevotella buccalis|Dialister microaerophilus,Prevotella copri|Dialister microaerophilus,Prevotella disiens|Dialister microaerophilus,Prevotella melaninogenica|Dialister microaerophilus,Prevotella multiformis|Dialister microaerophilus,Prevotella oralis|Dialister microaerophilus,Prevotella oris|Dialister microaerophilus,Prevotella salivae|Dialister microaerophilus,Prevotella timonensis|Dialister microaerophilus,Propionibacterium acnes|Dialister microaerophilus,Propionibacterium freudenreichii|Dialister microaerophilus,Proteus mirabilis|Dialister microaerophilus,Proteus penneri|Dialister microaerophilus,Pseudoflavonifractor capillosus|Dialister

155

paracaei|Eggerthella lenta,Lactobacillus plantarum|Eggerthella lenta,Lactobacillus reuteri|Eggerthella lenta,Lactobacillus rhamnosus|Eggerthella lenta,Lactobacillus ruminis|Eggerthella lenta,Lactobacillus sakei|Eggerthella lenta,Lactobacillus salivarius|Eggerthella lenta,Lactococcus lactis|Eggerthella lenta,Lautropia mirabilis|Eggerthella lenta,Leuconostoc citreum|Eggerthella lenta,Leuconostoc gasicomitatum|Eggerthella lenta,Leuconostoc mesenteroides|Eggerthella lenta,Listeria monocytogenes|Eggerthella lenta,Marvinbryantia formatexigens|Eggerthella lenta,Megamonas hypermegalae|Eggerthella lenta,Megasphaera micronuformis|Eggerthella lenta,Methanobrevibacter smithii|Eggerthella lenta,Methanosphaera stadtmanae|Eggerthella lenta,Methylobacterium radiotolerans|Eggerthella lenta,Mitsuokella multacida|Eggerthella lenta,Mobiluncus curtisii|Eggerthella lenta,Mycoplasma hominis|Eggerthella lenta,Neisseria mucosa|Eggerthella lenta,Odoribacter splanchnicus|Eggerthella lenta,Olsenella ulii|Eggerthella lenta,Oribacterium sinus|Eggerthella lenta,Oxalobacter formigenes|Eggerthella lenta,Parabacteroides distansoni|Eggerthella lenta,Parabacteroides johnsonii|Eggerthella lenta,Parabacteroides merdae|Eggerthella lenta,Parvimonas micra|Eggerthella lenta,Pediococcus acidilactici|Eggerthella lenta,Pediococcus pentosaceus|Eggerthella lenta,Peptoniphilus duerdenii|Eggerthella lenta,Peptoniphilus harei|Eggerthella lenta,Peptoniphilus lacrimalis|Eggerthella lenta,Peptostreptococcus anaeobius|Eggerthella lenta,Peptostreptococcus stomatis|Eggerthella lenta,Porphyromonas asaccharolytica|Eggerthella lenta,Porphyromonas uenonis|Eggerthella lenta,Prevotella amnii|Eggerthella lenta,Prevotella bergensis|Eggerthella lenta,Prevotella bivia|Eggerthella lenta,Prevotella buccae|Eggerthella lenta,Prevotella buccalis|Eggerthella lenta,Prevotella copri|Eggerthella lenta,Prevotella disiens|Eggerthella lenta,Prevotella melaninogenica|Eggerthella lenta,Prevotella multiformis|Eggerthella lenta,Prevotella oralis|Eggerthella lenta,Prevotella oris|Eggerthella lenta,Prevotella salivae|Eggerthella lenta,Prevotella timonensis|Eggerthella lenta,Propionibacterium acnes|Eggerthella lenta,Propionibacterium freudenreichii|Eggerthella lenta,Proteus mirabilis|Eggerthella lenta,Proteus penneri|Eggerthella lenta,Pseudoflavonifractor capillosus|Eggerthella lenta,Pseudomonas aeruginosa|Eggerthella lenta,Pseudomonas fluorescens|Eggerthella lenta,Pseudomonas putida|Eggerthella lenta,Pseudoramibacter alactolyticus|Eggerthella lenta,Pyramidobacter piscicola|Eggerthella lenta,Rhodopseudomonas palustris|Eggerthella lenta,Roseburia intestinalis|Eggerthella lenta,Roseburia inulinivorans|Eggerthella lenta,Rothia dentocariosa|Eggerthella lenta,Rothia mucilaginosa|Eggerthella lenta,Ruminococcus albus|Eggerthella lenta,Ruminococcus bromii|Eggerthella lenta,Ruminococcus gnavus|Eggerthella lenta,Ruminococcus lactaris|Eggerthella lenta,Ruminococcus obeum|Eggerthella lenta,Ruminococcus torques|Eggerthella lenta,Selenomonas sputigena|Eggerthella lenta,Shigella boydii|Eggerthella lenta,Shigella dysenteriae|Eggerthella lenta,Shigella sonnei|Eggerthella lenta,Slackia exigua|Eggerthella lenta,Solobacterium moorei|Eggerthella lenta,Staphylococcus aureus|Eggerthella lenta,Staphylococcus epidermidis|Eggerthella lenta,Staphylococcus hominis|Eggerthella lenta,Staphylococcus saprophyticus|Eggerthella lenta,Staphylococcus warneri|Eggerthella lenta,Streptococcus agalactiae|Eggerthella lenta,Streptococcus anginosus|Eggerthella lenta,Streptococcus australis|Eggerthella lenta,Streptococcus bovis|Eggerthella lenta,Streptococcus cristatus|Eggerthella lenta,Streptococcus dysgalactiae|Eggerthella lenta,Streptococcus equinus|Eggerthella lenta,Streptococcus gordonii|Eggerthella lenta,Streptococcus infantarius|Eggerthella lenta,Streptococcus infantis|Eggerthella lenta,Streptococcus mitis|Eggerthella lenta,Streptococcus mutans|Eggerthella lenta,Streptococcus oralis|Eggerthella lenta,Streptococcus parasanguinis|Eggerthella lenta,Streptococcus peroris|Eggerthella lenta,Streptococcus pneumoniae|Eggerthella lenta,Streptococcus salivarius|Eggerthella lenta,Streptococcus sanguinis|Eggerthella lenta,Streptococcus thermophilus|Eggerthella lenta,Streptococcus vestibularis|Eggerthella lenta,Subdoligranulum variable|Eggerthella lenta,Succinatimonas hippelii|Eggerthella lenta,Sutterella wadsworthensis|Eggerthella lenta,Tropheryma whippelii|Eggerthella lenta,Veillonella atypica|Eggerthella lenta,Veillonella dispar|Eggerthella lenta,Veillonella parvula|Eggerthella lenta,Victivallis vadensis|Eggerthella lenta,Eikenella corrodens,Eikenella corrodens,Enterobacter cancerogenus|Eikenella corrodens,Enterobacter cloacae|Eikenella corrodens,Enterococcus faecalis|Eikenella corrodens,Enterococcus faecium|Eikenella corrodens,Enterococcus gallinarum|Eikenella corrodens,Erysipelotrichaceae bacterium 3_1_53|Eikenella corrodens,Escherichia coli|Eikenella corrodens,Escherichia fergusonii|Eikenella corrodens,Ethanoligenes harbinense|Eikenella corrodens,Eubacterium cellulosolvens|Eikenella corrodens,Eubacterium eligens|Eikenella corrodens,Eubacterium hallii|Eikenella corrodens,Eubacterium limosum|Eikenella corrodens,Eubacterium rectale|Eikenella corrodens,Eubacterium siraeum|Eikenella corrodens,Eubacterium ventriosum|Eikenella corrodens,Faecalibacterium prausnitzii|Eikenella corrodens,Finegoldia magna|Eikenella corrodens,Fusobacterium gonidiaformans|Eikenella corrodens,Fusobacterium mortiferum|Eikenella corrodens,Fusobacterium nucleatum|Eikenella corrodens,Fusobacterium varium|Eikenella corrodens,Gardnerella vaginalis|Eikenella corrodens,Gemella haemolysans|Eikenella corrodens,Gemella morbillorum|Eikenella corrodens,Gordonibacter pameelaee|Eikenella corrodens,Granulicatella adiacens|Eikenella corrodens,Granulicatella elegans|Eikenella corrodens,Haemophilus influenzae|Eikenella corrodens,Haemophilus parainfluenzae|Eikenella corrodens,Helicobacter pullorum|Eikenella corrodens,Helicobacter pylori|Eikenella corrodens,Holdenmania filiformis|Eikenella corrodens,Kingella oralis|Eikenella corrodens,Klebsiella pneumoniae|Eikenella corrodens,Klebsiella variicola|Eikenella corrodens,Lachnospiraceae bacterium 5_1_57FAA|Eikenella corrodens,Lactobacillus acidophilus|Eikenella corrodens,Lactobacillus amylovorus|Eikenella corrodens,Lactobacillus brevis|Eikenella corrodens,Lactobacillus casei|Eikenella corrodens,Lactobacillus crispatus|Eikenella corrodens,Lactobacillus delbrueckii|Eikenella corrodens,Lactobacillus fermentum|Eikenella corrodens,Lactobacillus gasseri|Eikenella corrodens,Lactobacillus iners|Eikenella corrodens,Lactobacillus jensenii|Eikenella corrodens,Lactobacillus johnsonii|Eikenella corrodens,Lactobacillus paracaei|Eikenella corrodens,Lactobacillus plantarum|Eikenella corrodens,Lactobacillus reuteri|Eikenella corrodens,Lactobacillus rhamnosus|Eikenella corrodens,Lactobacillus salivarius|Eikenella corrodens,Lactobacillus sakei|Eikenella corrodens,Lactobacillus salivarius|Eikenella corrodens,Lactococcus lactis|Eikenella corrodens,Lautropia mirabilis|Eikenella corrodens,Leuconostoc citreum|Eikenella corrodens,Leuconostoc gasicomitatum|Eikenella corrodens,Leuconostoc mesenteroides|Eikenella corrodens,Listeria monocytogenes|Eikenella corrodens,Marvinbryantia formatexigens|Eikenella corrodens,Megamonas hypermegalae|Eikenella corrodens,Megasphaera micronuformis|Eikenella corrodens,Methanobrevibacter smithii|Eikenella corrodens,Methanosphaera stadtmanae|Eikenella corrodens,Methylobacterium radiotolerans|Eikenella corrodens,Mitsuokella multacida|Eikenella corrodens,Mobiluncus curtisii|Eikenella corrodens,Mycoplasma hominis|Eikenella corrodens,Neisseria mucosa|Eikenella corrodens,Odoribacter splanchnicus|Eikenella corrodens,Olsenella ulii|Eikenella corrodens,Oribacterium sinus|Eikenella corrodens,Oxalobacter formigenes|Eikenella corrodens,Parabacteroides distansoni|Eikenella corrodens,Parabacteroides johnsonii|Eikenella corrodens,Parabacteroides merdae|Eikenella corrodens,Parvimonas micra|Eikenella corrodens,Pediococcus acidilactici|Eikenella corrodens,Pediococcus pentosaceus|Eikenella corrodens,Peptoniphilus duerdenii|Eikenella corrodens,Peptoniphilus harei|Eikenella corrodens,Peptoniphilus lacrimalis|Eikenella corrodens,Peptostreptococcus anaeobius|Eikenella corrodens,Peptostreptococcus stomatis|Eikenella corrodens,Porphyromonas asaccharolytica|Eikenella corrodens,Porphyromonas uenonis|Eikenella corrodens,Prevotella amnii|Eikenella corrodens,Prevotella bergensis|Eikenella corrodens,Prevotella bivia|Eikenella corrodens,Prevotella buccae|Eikenella corrodens,Prevotella buccalis|Eikenella corrodens,Prevotella copri|Eikenella corrodens,Prevotella disiens|Eikenella corrodens,Prevotella melaninogenica|Eikenella corrodens,Prevotella multiformis|Eikenella corrodens,Prevotella oralis|Eikenella corrodens,Prevotella oris|Eikenella corrodens,Prevotella salivae|Eikenella corrodens,Prevotella timonensis|Eikenella corrodens,Propionibacterium acnes|Eikenella corrodens,Propionibacterium freudenreichii|Eikenella corrodens,Proteus mirabilis|Eikenella corrodens,Proteus penneri|Eikenella corrodens,Pseudoflavonifractor capillosus|Eikenella corrodens,Pseudomonas aeruginosa|Eikenella corrodens,Pseudomonas fluorescens|Eikenella corrodens,Pseudomonas putida|Eikenella corrodens,Pseudoramibacter alactolyticus|Eikenella corrodens,Pyramidobacter piscicola|Eikenella corrodens,Rhodopseudomonas palustris|Eikenella corrodens,Roseburia intestinalis|Eikenella corrodens,Roseburia inulinivorans|Eikenella corrodens,Rothia dentocariosa|Eikenella corrodens,Rothia mucilaginosa|Eikenella corrodens,Ruminococcus albus|Eikenella corrodens,Ruminococcus bromii|Eikenella corrodens,Ruminococcus gnavus|Eikenella corrodens,Ruminococcus lactaris|Eikenella corrodens,Ruminococcus obeum|Eikenella corrodens,Ruminococcus torques|Eikenella corrodens,Selenomonas sputigena|Eikenella corrodens,Shigella boydii|Eikenella corrodens,Shigella dysenteriae|Eikenella corrodens,Shigella sonnei|Eikenella corrodens,Slackia exigua|Eikenella corrodens,Solobacterium moorei|Eikenella corrodens,Staphylococcus aureus|Eikenella corrodens,Staphylococcus epidermidis|Eikenella corrodens,Staphylococcus hominis|Eikenella corrodens,Staphylococcus saprophyticus|Eikenella corrodens,Staphylococcus warneri|Eikenella corrodens,Streptococcus agalactiae|Eikenella corrodens,Streptococcus anginosus|Eikenella corrodens,Streptococcus australis|Eikenella corrodens,Streptococcus bovis|Eikenella corrodens,Streptococcus cristatus|Eikenella corrodens,Streptococcus dysgalactiae|Eikenella corrodens,Streptococcus equinus|Eikenella corrodens,Streptococcus gordonii|Eikenella corrodens,Streptococcus infantarius|Eikenella corrodens,Streptococcus infantis|Eikenella corrodens,Streptococcus mitis|Eikenella corrodens,Streptococcus mutans|Eikenella corrodens,Streptococcus oralis|Eikenella corrodens,Streptococcus parasanguinis|Eikenella corrodens,Streptococcus peroris|Eikenella corrodens,Streptococcus pneumoniae|Eikenella corrodens,Streptococcus salivarius|Eikenella corrodens,Streptococcus sanguinis|Eikenella corrodens,Streptococcus thermophilus|Eikenella corrodens,Streptococcus vestibularis|Eikenella corrodens,Subdoligranulum variable|Eikenella corrodens,Succinatimonas hippelii|Eikenella corrodens,Sutterella wadsworthensis|Eikenella corrodens,Tropheryma whippelii|Eikenella corrodens,Veillonella atypica|Eikenella corrodens,Veillonella dispar|Eikenella corrodens,Veillonella parvula|Eikenella corrodens,Victivallis vadensis|Eikenella corrodens,Enterobacter cancerogenus,Enterobacter cancerogenus,Enterobacter cloacae|Enterobacter cancerogenus,Enterococcus faecalis|Enterobacter cancerogenus,Enterococcus faecium|Enterobacter cancerogenus,Enterococcus gallinarum|Enterobacter cancerogenus,Erysipelotrichaceae bacterium 3_1_53|Enterobacter cancerogenus,Escherichia coli|Enterobacter cancerogenus,Escherichia fergusonii|Enterobacter cancerogenus,Ethanoligenes harbinense|Enterobacter cancerogenus,Eubacterium cellulosolvens|Enterobacter cancerogenus,Eubacterium eligens|Enterobacter cancerogenus,Eubacterium hallii|Enterobacter cancerogenus,Eubacterium limosum|Enterobacter cancerogenus,Eubacterium rectale|Enterobacter cancerogenus,Eubacterium siraeum|Enterobacter cancerogenus,Eubacterium ventriosum|Enterobacter cancerogenus,Faecalibacterium prausnitzii|Enterobacter cancerogenus,Finegoldia magna|Enterobacter cancerogenus,Fusobacterium gonidiaformans|Enterobacter cancerogenus,Fusobacterium mortiferum|Enterobacter cancerogenus,Fusobacterium nucleatum|Enterobacter cancerogenus,Fusobacterium varium|Enterobacter cancerogenus,Gardnerella vaginalis|Enterobacter cancerogenus,Gemella haemolysans|Enterobacter cancerogenus,Gemella morbillorum|Enterobacter cancerogenus,Gordonibacter pameelaee|Enterobacter cancerogenus,Granulicatella adiacens|Enterobacter cancerogenus,Granulicatella elegans|Enterobacter cancerogenus,Haemophilus influenzae|Enterobacter cancerogenus,Haemophilus parainfluenzae|Enterobacter cancerogenus,Helicobacter pullorum|Enterobacter cancerogenus,Helicobacter pylori|Enterobacter cancerogenus,Holdenmania filiformis|Enterobacter cancerogenus,Kingella oralis|Enterobacter cancerogenus,Klebsiella pneumoniae|Enterobacter cancerogenus,Klebsiella variicola|Enterobacter cancerogenus,Lachnospiraceae bacterium 5_1_57FAA|Enterobacter cancerogenus,Lactobacillus acidophilus|Enterobacter cancerogenus,Lactobacillus amylovorus|Enterobacter cancerogenus,Lactobacillus brevis|Enterobacter cancerogenus,Lactobacillus casei|Enterobacter cancerogenus,Lactobacillus crispatus|Enterobacter cancerogenus,Lactobacillus delbrueckii|Enterobacter cancerogenus,Lactobacillus fermentum|Enterobacter cancerogenus,Lactobacillus gasseri|Enterobacter cancerogenus,Lactobacillus iners|Enterobacter cancerogenus,Lactobacillus jensenii|Enterobacter cancerogenus,Lactobacillus johnsonii|Enterobacter cancerogenus,Lactobacillus paracaei|Enterobacter cancerogenus,Lactobacillus plantarum|Enterobacter cancerogenus,Lactobacillus reuteri|Enterobacter cancerogenus,Lactobacillus rhamnosus|Enterobacter cancerogenus,Lactobacillus salivarius|Enterobacter cancerogenus,Lactobacillus sakei|Enterobacter cancerogenus,Lactobacillus salivarius|Enterobacter cancerogenus,Lactococcus lactis|Enterobacter cancerogenus,Lautropia mirabilis|Enterobacter cancerogenus,Leuconostoc citreum|Enterobacter cancerogenus,Leuconostoc gasicomitatum|Enterobacter cancerogenus,Leuconostoc mesenteroides|Enterobacter cancerogenus,Listeria monocytogenes|Enterobacter cancerogenus,Marvinbryantia formatexigens|Enterobacter cancerogenus,Megamonas hypermegalae|Enterobacter cancerogenus,Megasphaera micronuformis|Enterobacter cancerogenus,Methanobrevibacter smithii|Enterobacter cancerogenus,Methanosphaera stadtmanae|Enterobacter cancerogenus,Methylobacterium radiotolerans|Enterobacter cancerogenus,Mitsuokella multacida|Enterobacter cancerogenus,Mobiluncus curtisii|Enterobacter cancerogenus,Mycoplasma hominis|Enterobacter cancerogenus,Neisseria mucosa|Enterobacter cancerogenus,Odoribacter splanchnicus|Enterobacter cancerogenus,Olsenella ulii|Enterobacter cancerogenus,Oribacterium sinus|Enterobacter cancerogenus,Oxalobacter formigenes|Enterobacter cancerogenus,Parabacteroides distansoni|Enterobacter cancerogenus,Parabacteroides johnsonii|Enterobacter cancerogenus,Parabacteroides merdae|Enterobacter cancerogenus,Parvimonas micra|Enterobacter cancerogenus,Pediococcus acidilactici|Enterobacter cancerogenus,Pediococcus pentosaceus|Enterobacter cancerogenus,Peptoniphilus duerdenii|Enterobacter cancerogenus,Peptoniphilus harei|Enterobacter cancerogenus,Peptoniphilus lacrimalis|Enterobacter cancerogenus,Peptostreptococcus anaeobius|Enterobacter cancerogenus,Peptostreptococcus stomatis|Enterobacter cancerogenus,Porphyromonas asaccharolytica|Enterobacter cancerogenus,Porphyromonas uenonis|Enterobacter cancerogenus,Prevotella amnii|Enterobacter cancerogenus,Prevotella bergensis|Enterobacter cancerogenus,Prevotella bivia|Enterobacter cancerogenus,Prevotella buccae|Enterobacter cancerogenus,Prevotella buccalis|Enterobacter cancerogenus,Prevotella copri|Enterobacter cancerogenus,Prevotella disiens|Enterobacter cancerogenus,Prevotella melaninogenica|Enterobacter cancerogenus,Prevotella multiformis|Enterobacter cancerogenus,Prevotella oralis|Enterobacter cancerogenus,Prevotella oris|Enterobacter cancerogenus,Prevotella salivae|Enterobacter cancerogenus,Prevotella timonensis|Enterobacter cancerogenus,Propionibacterium acnes|Enterobacter cancerogenus,Propionibacterium freudenreichii|Enterobacter cancerogenus,Proteus mirabilis|Enterobacter cancerogenus,Proteus penneri|Enterobacter cancerogenus,Pseudoflavonifractor capillosus|Enterobacter cancerogenus,Pseudomonas aeruginosa|Enterobacter cancerogenus,Pseudomonas fluorescens|Enterobacter cancerogenus,Pseudomonas putida|Enterobacter cancerogenus,Pseudoramibacter alactolyticus|Enterobacter cancerogenus,Pyramidobacter piscicola|Enterobacter cancerogenus,Rhodopseudomonas palustris|Enterobacter cancerogenus,Roseburia intestinalis|Enterobacter cancerogenus,Roseburia inulinivorans|Enterobacter cancerogenus,Rothia dentocariosa|Enterobacter cancerogenus,Rothia mucilaginosa|Enterobacter cancerogenus,Ruminococcus albus|Enterobacter cancerogenus,Ruminococcus bromii|Enterobacter cancerogenus,Ruminococcus gnavus|Enterobacter cancerogenus,Ruminococcus lactaris|Enterobacter cancerogenus,Ruminococcus obeum|Enterobacter cancerogenus,Ruminococcus torques|Enterobacter cancerogenus,Selenomonas sputigena|Enterobacter cancerogenus,Shigella boydii|Enterobacter cancerogenus,Shigella dysenteriae|Enterobacter cancerogenus,Shigella sonnei|Enterobacter cancerogenus,Slackia exigua|Enterobacter cancerogenus,Solobacterium moorei|Enterobacter cancerogenus,Staphylococcus aureus|Enterobacter cancerogenus,Staphylococcus epidermidis|Enterobacter cancerogenus,Staphylococcus hominis|Enterobacter cancerogenus,Staphylococcus saprophyticus|Enterobacter cancerogenus,Staphylococcus warneri|Enterobacter cancerogenus,Streptococcus agalactiae|Enterobacter cancerogenus,Streptococcus anginosus|Enterobacter cancerogenus,Streptococcus australis|Enterobacter cancerogenus,Streptococcus bovis|Enterobacter cancerogenus,Streptococcus cristatus|Enterobacter cancerogenus,Streptococcus dysgalactiae|Enterobacter cancerogenus,Streptococcus equinus|Enterobacter cancerogenus,Streptococcus gordonii|Enterobacter cancerogenus,Streptococcus infantarius|Enterobacter cancerogenus,Streptococcus infantis|Enterobacter cancerogenus,Streptococcus mitis|Enterobacter cancerogenus,Streptococcus mutans|Enterobacter cancerogenus,Streptococcus oralis|Enterobacter cancerogenus,Streptococcus parasanguinis|Enterobacter cancerogenus,Streptococcus peroris|Enterobacter cancerogenus,Streptococcus pneumoniae|Enterobacter cancerogenus,Streptococcus salivarius|Enterobacter cancerogenus,Streptococcus sanguinis|Enterobacter cancerogenus,Streptococcus thermophilus|Enterobacter cancerogenus,Streptococcus vestibularis|Enterobacter cancerogenus,Subdoligranulum variable|Enterobacter cancerogenus,Succinatimonas

hippei|Enterobacter cancerogenus,Sutterella wadsworthensis|Enterobacter cancerogenus,Tropheryma whipplei|Enterobacter cancerogenus,Veillonella atypica|Enterobacter cancerogenus,Veillonella dispar|Enterobacter cancerogenus,Veillonella parvula|Enterobacter cancerogenus,Victivallis vadensis|Enterobacter cloacae,Enterobacter cloacae|Enterobacter cloacae,Enterococcus faecalis|Enterobacter cloacae,Enterococcus faecium|Enterobacter cloacae,Enterococcus gallinarum|Enterobacter cloacae,Erysipelotrichaceae bacterium 3_1_53|Enterobacter cloacae,Escherichia coli|Enterobacter cloacae,Escherichia fergusonii|Enterobacter cloacae,Ethanoligenens harbinense|Enterobacter cloacae,Eubacterium cellulosolvens|Enterobacter cloacae,Eubacterium eligens|Enterobacter cloacae,Eubacterium hallii|Enterobacter cloacae,Eubacterium limosum|Enterobacter cloacae,Eubacterium rectale|Enterobacter cloacae,Eubacterium siraeum|Enterobacter cloacae,Eubacterium ventriosum|Enterobacter cloacae,Faecalibacterium prausnitzii|Enterobacter cloacae,Finogoldia magna|Enterobacter cloacae,Fusobacterium gonidiaformans|Enterobacter cloacae,Fusobacterium mortiferum|Enterobacter cloacae,Fusobacterium nucleatum|Enterobacter cloacae,Fusobacterium varium|Enterobacter cloacae,Gardnerella vaginalis|Enterobacter cloacae,Gemella haemolysans|Enterobacter cloacae,Gemella morbillorum|Enterobacter cloacae,Gordonibacter pamelaiae|Enterobacter cloacae,Granulicatella adiacens|Enterobacter cloacae,Granulicatella elegans|Enterobacter cloacae,Haemophilus influenzae|Enterobacter cloacae,Haemophilus parainfluenzae|Enterobacter cloacae,Helicobacter pullorum|Enterobacter cloacae,Helicobacter pylori|Enterobacter cloacae,Holdemania filiformis|Enterobacter cloacae,Kingella oralis|Enterobacter cloacae,Klebsiella pneumoniae|Enterobacter cloacae,Klebsiella variicola|Enterobacter cloacae,Lachnospiraceae bacterium 5_1_57FAA|Enterobacter cloacae,Lactobacillus acidophilus|Enterobacter cloacae,Lactobacillus amylovorus|Enterobacter cloacae,Lactobacillus brevis|Enterobacter cloacae,Lactobacillus casei|Enterobacter cloacae,Lactobacillus crispatus|Enterobacter cloacae,Lactobacillus delbrueckii|Enterobacter cloacae,Lactobacillus fermentum|Enterobacter cloacae,Lactobacillus gasseri|Enterobacter cloacae,Lactobacillus iners|Enterobacter cloacae,Lactobacillus jensenii|Enterobacter cloacae,Lactobacillus johnsonii|Enterobacter cloacae,Lactobacillus paracasei|Enterobacter cloacae,Lactobacillus plantarum|Enterobacter cloacae,Lactobacillus reuteri|Enterobacter cloacae,Lactobacillus rhamnosus|Enterobacter cloacae,Lactobacillus ruminis|Enterobacter cloacae,Lactobacillus sakei|Enterobacter cloacae,Lactobacillus salivarius|Enterobacter cloacae,Lactococcus lactis|Enterobacter cloacae,Lautropia mirabilis|Enterobacter cloacae,Leuconostoc citreum|Enterobacter cloacae,Leuconostoc gasicomitatum|Enterobacter cloacae,Leuconostoc mesenteroides|Enterobacter cloacae,Listeria monocytogenes|Enterobacter cloacae,Marvinbryantia formatexigens|Enterobacter cloacae,Megamonas hypermegale|Enterobacter cloacae,Megaspheara micronuciformis|Enterobacter cloacae,Methanobrevibacter smithii|Enterobacter cloacae,Methanospheara stadmanae|Enterobacter cloacae,Methylobacterium radiotolerans|Enterobacter cloacae,Mitsuokella multacida|Enterobacter cloacae,Mobiluncus curtisii|Enterobacter cloacae,Mycoplasma hominis|Enterobacter cloacae,Neisseria mucosa|Enterobacter cloacae,Odoribacter splanchnicus|Enterobacter cloacae,Olsenella uli|Enterobacter cloacae,Oribacterium sinus|Enterobacter cloacae,Oxalobacter formigenes|Enterobacter cloacae,Parabacteroides distasonis|Enterobacter cloacae,Parabacteroides johnsonii|Enterobacter cloacae,Parabacteroides merdae|Enterobacter cloacae,Parvimonas micra|Enterobacter cloacae,Pediococcus acidilactici|Enterobacter cloacae,Pediococcus pentosaceus|Enterobacter cloacae,Peptoniphilus duerdenii|Enterobacter cloacae,Peptoniphilus harei|Enterobacter cloacae,Peptoniphilus lacrimalis|Enterobacter cloacae,Peptostreptococcus anaerobius|Enterobacter cloacae,Peptostreptococcus stomatis|Enterobacter cloacae,Porphyromonas asaccharolytica|Enterobacter cloacae,Porphyromonas uenonis|Enterobacter cloacae,Prevotella amnii|Enterobacter cloacae,Prevotella bergensis|Enterobacter cloacae,Prevotella bivia|Enterobacter cloacae,Prevotella buccae|Enterobacter cloacae,Prevotella buccalis|Enterobacter cloacae,Prevotella copri|Enterobacter cloacae,Prevotella disiens|Enterobacter cloacae,Prevotella melaninogenica|Enterobacter cloacae,Prevotella multiformis|Enterobacter cloacae,Prevotella oralis|Enterobacter cloacae,Prevotella oris|Enterobacter cloacae,Prevotella salivae|Enterobacter cloacae,Prevotella timonensis|Enterobacter cloacae,Propionibacterium acnes|Enterobacter cloacae,Propionibacterium freudenreichii|Enterobacter cloacae,Proteus mirabilis|Enterobacter cloacae,Proteus penneri|Enterobacter cloacae,Pseudoflavonifractor capillosus|Enterobacter cloacae,Pseudomonas aeruginosa|Enterobacter cloacae,Pseudomonas fluorescens|Enterobacter cloacae,Pseudomonas putida|Enterobacter cloacae,Pseudoramibacter alactolyticus|Enterobacter cloacae,Pyramidobacter piscicola|Enterobacter cloacae,Rhodopseudomonas palustris|Enterobacter cloacae,Roseburia intestinalis|Enterobacter cloacae,Roseburia inulinivorans|Enterobacter cloacae,Rothia dentocariosa|Enterobacter cloacae,Rothia mucilaginosa|Enterobacter cloacae,Ruminococcus bromii|Enterobacter cloacae,Ruminococcus gnavus|Enterobacter cloacae,Ruminococcus lactaris|Enterobacter cloacae,Ruminococcus obeum|Enterobacter cloacae,Ruminococcus torques|Enterobacter cloacae,Selenomonas sputigena|Enterobacter cloacae,Shigella boydii|Enterobacter cloacae,Shigella dysenteriae|Enterobacter cloacae,Shigella sonnei|Enterobacter cloacae,Shigella exigua|Enterobacter cloacae,Solobacterium moorei|Enterobacter cloacae,Staphylococcus aureus|Enterobacter cloacae,Staphylococcus epidermidis|Enterobacter cloacae,Staphylococcus hominis|Enterobacter cloacae,Staphylococcus saprophyticus|Enterobacter cloacae,Staphylococcus warneri|Enterobacter cloacae,Streptococcus agalactiae|Enterobacter cloacae,Streptococcus anginosus|Enterobacter cloacae,Streptococcus australis|Enterobacter cloacae,Streptococcus bovis|Enterobacter cloacae,Streptococcus cristatus|Enterobacter cloacae,Streptococcus dysgalactiae|Enterobacter cloacae,Streptococcus equinus|Enterobacter cloacae,Streptococcus gordonii|Enterobacter cloacae,Streptococcus infantarius|Enterobacter cloacae,Streptococcus infantis|Enterobacter cloacae,Streptococcus mitis|Enterobacter cloacae,Streptococcus mutans|Enterobacter cloacae,Streptococcus oralis|Enterobacter cloacae,Streptococcus parasanguis|Enterobacter cloacae,Streptococcus peroris|Enterobacter cloacae,Streptococcus pneumoniae|Enterobacter cloacae,Streptococcus salivarius|Enterobacter cloacae,Streptococcus sanguinis|Enterobacter cloacae,Streptococcus thermophilus|Enterobacter cloacae,Streptococcus vestibularis|Enterobacter cloacae,Subdoligranulum variable|Enterobacter cloacae,Succinatumonas hippie|Enterobacter cloacae,Sutterella wadsworthensis|Enterobacter cloacae,Sutterella wadsworthensis|Enterobacter cloacae,Tropheryma whipplei|Enterobacter cloacae,Tropheryma whipplei|Enterobacter cloacae,Veillonella atypica|Enterobacter cloacae,Veillonella dispar|Enterobacter cloacae,Veillonella parvula|Enterobacter cloacae,Veillonella dispar|Enterobacter cloacae,Enterococcus faecium|Enterococcus faecalis|Enterococcus gallinarum|Enterococcus faecalis,Erysipelotrichaceae bacterium 3_1_53|Enterococcus faecalis,Escherichia coli|Enterococcus faecalis,Escherichia fergusonii|Enterococcus faecalis,Ethanoligenens harbinense|Enterococcus faecalis,Eubacterium cellulosolvens|Enterococcus faecalis,Eubacterium eligens|Enterococcus faecalis,Eubacterium hallii|Enterococcus faecalis,Eubacterium limosum|Enterococcus faecalis,Eubacterium rectale|Enterococcus faecalis,Eubacterium siraeum|Enterococcus faecalis,Eubacterium ventriosum|Enterococcus faecalis,Faecalibacterium prausnitzii|Enterococcus faecalis,Finogoldia magna|Enterococcus faecalis,Fusobacterium gonidiaformans|Enterococcus faecalis,Fusobacterium mortiferum|Enterococcus faecalis,Fusobacterium nucleatum|Enterococcus faecalis,Fusobacterium varium|Enterococcus faecalis,Gardnerella vaginalis|Enterococcus faecalis,Gemella haemolysans|Enterococcus faecalis,Gemella morbillorum|Enterococcus faecalis,Gordonibacter pamelaiae|Enterococcus faecalis,Granulicatella adiacens|Enterococcus faecalis,Granulicatella elegans|Enterococcus faecalis,Haemophilus influenzae|Enterococcus faecalis,Haemophilus parainfluenzae|Enterococcus faecalis,Helicobacter pullorum|Enterococcus faecalis,Helicobacter pylori|Enterococcus faecalis,Holdemania filiformis|Enterococcus faecalis,Kingella oralis|Enterococcus faecalis,Klebsiella pneumoniae|Enterococcus faecalis,Klebsiella variicola|Enterococcus faecalis,Lachnospiraceae bacterium 5_1_57FAA|Enterococcus faecalis,Lactobacillus acidophilus|Enterococcus faecalis,Lactobacillus amylovorus|Enterococcus faecalis,Lactobacillus brevis|Enterococcus faecalis,Lactobacillus casei|Enterococcus faecalis,Lactobacillus crispatus|Enterococcus faecalis,Lactobacillus delbrueckii|Enterococcus faecalis,Lactobacillus fermentum|Enterococcus faecalis,Lactobacillus gasseri|Enterococcus faecalis,Lactobacillus iners|Enterococcus faecalis,Lactobacillus jensenii|Enterococcus faecalis,Lactobacillus johnsonii|Enterococcus faecalis,Lactobacillus paracasei|Enterococcus faecalis,Lactobacillus plantarum|Enterococcus faecalis,Lactobacillus reuteri|Enterococcus faecalis,Lactobacillus rhamnosus|Enterococcus faecalis,Lactobacillus ruminis|Enterococcus faecalis,Lactobacillus sakei|Enterococcus faecalis,Lactobacillus salivarius|Enterococcus faecalis,Lactococcus lactis|Enterococcus faecalis,Lautropia mirabilis|Enterococcus faecalis,Leuconostoc citreum|Enterococcus faecalis,Leuconostoc gasicomitatum|Enterococcus faecalis,Leuconostoc mesenteroides|Enterococcus faecalis,Listeria monocytogenes|Enterococcus faecalis,Marvinbryantia formatexigens|Enterococcus faecalis,Megamonas hypermegale|Enterococcus faecalis,Megaspheara micronuciformis|Enterococcus faecalis,Methanobrevibacter smithii|Enterococcus faecalis,Methanospheara stadmanae|Enterococcus faecalis,Methylobacterium radiotolerans|Enterococcus faecalis,Mitsuokella multacida|Enterococcus faecalis,Mobiluncus curtisii|Enterococcus faecalis,Mycoplasma hominis|Enterococcus faecalis,Neisseria mucosa|Enterococcus faecalis,Odoribacter splanchnicus|Enterococcus faecalis,Olsenella uli|Enterococcus faecalis,Oribacterium sinus|Enterococcus faecalis,Oxalobacter formigenes|Enterococcus faecalis,Parabacteroides distasonis|Enterococcus faecalis,Parabacteroides johnsonii|Enterococcus faecalis,Parabacteroides merdae|Enterococcus faecalis,Parvimonas micra|Enterococcus faecalis,Pediococcus acidilactici|Enterococcus faecalis,Pediococcus pentosaceus|Enterococcus faecalis,Peptoniphilus duerdenii|Enterococcus faecalis,Peptoniphilus harei|Enterococcus faecalis,Peptoniphilus lacrimalis|Enterococcus faecalis,Peptostreptococcus anaerobius|Enterococcus faecalis,Peptostreptococcus stomatis|Enterococcus faecalis,Porphyromonas asaccharolytica|Enterococcus faecalis,Porphyromonas uenonis|Enterococcus faecalis,Prevotella amnii|Enterococcus faecalis,Prevotella bergensis|Enterococcus faecalis,Prevotella bivia|Enterococcus faecalis,Prevotella buccae|Enterococcus faecalis,Prevotella buccalis|Enterococcus faecalis,Prevotella copri|Enterococcus faecalis,Prevotella disiens|Enterococcus faecalis,Prevotella melaninogenica|Enterococcus faecalis,Prevotella multiformis|Enterococcus faecalis,Prevotella oralis|Enterococcus faecalis,Prevotella oris|Enterococcus faecalis,Prevotella salivae|Enterococcus faecalis,Prevotella timonensis|Enterococcus faecalis,Propionibacterium acnes|Enterococcus faecalis,Propionibacterium freudenreichii|Enterococcus faecalis,Proteus mirabilis|Enterococcus faecalis,Proteus penneri|Enterococcus faecalis,Pseudoflavonifractor capillosus|Enterococcus faecalis,Pseudomonas aeruginosa|Enterococcus faecalis,Pseudomonas fluorescens|Enterococcus faecalis,Pseudomonas

putida[Enterococcus faecium,Pseudoramibacter alactolyticus[Enterococcus faecium,Pyramidobacter piscolens[Enterococcus faecium,Rhodopseudomonas palustris[Enterococcus faecium,Roseburia intestinalis[Enterococcus faecium,Roseburia inulinivorans[Enterococcus faecium,Rothia dentocariosa[Enterococcus faecium,Rothia mucilaginosa[Enterococcus faecium,Ruminococcus albus[Enterococcus faecium,Ruminococcus bromii[Enterococcus faecium,Ruminococcus gnavus[Enterococcus faecium,Ruminococcus lactaris[Enterococcus faecium,Ruminococcus obeum[Enterococcus faecium,Ruminococcus torques[Enterococcus faecium,Selenomonas sputigena[Enterococcus faecium,Shigella boydii[Enterococcus faecium,Shigella dysenteriae[Enterococcus faecium,Shigella sonnei[Enterococcus faecium,Slackia exigua[Enterococcus faecium,Solobacterium moorei[Enterococcus faecium,Staphylococcus aureus[Enterococcus faecium,Staphylococcus epidermidis[Enterococcus faecium,Staphylococcus hominis[Enterococcus faecium,Staphylococcus saprophyticus[Enterococcus faecium,Staphylococcus warneri[Enterococcus faecium,Streptococcus agalactiae[Enterococcus faecium,Streptococcus anginosus[Enterococcus faecium,Streptococcus australis[Enterococcus faecium,Streptococcus bovis[Enterococcus faecium,Streptococcus cristatus[Enterococcus faecium,Streptococcus dysgalactiae[Enterococcus faecium,Streptococcus equinus[Enterococcus faecium,Streptococcus gordonii[Enterococcus faecium,Streptococcus infantarius[Enterococcus faecium,Streptococcus infantis[Enterococcus faecium,Streptococcus mitis[Enterococcus faecium,Streptococcus mutans[Enterococcus faecium,Streptococcus oralis[Enterococcus faecium,Streptococcus parasanguinis[Enterococcus faecium,Streptococcus peroris[Enterococcus faecium,Streptococcus pneumoniae[Enterococcus faecium,Streptococcus salivarius[Enterococcus faecium,Streptococcus sanguinis[Enterococcus faecium,Streptococcus thermophilus[Enterococcus faecium,Streptococcus vestibularis[Enterococcus faecium,Subdoligranulum variable[Enterococcus faecium,Succinatimonas hippei[Enterococcus faecium,Sutterella wadsworthensis[Enterococcus faecium,Tropheryma whipplei[Enterococcus faecium,Veillonella atypica[Enterococcus faecium,Veillonella dispar[Enterococcus faecium,Veillonella parvula[Enterococcus faecium,Victivallis vadensis[Enterococcus gallinarum,Enterococcus gallinarum,Enterococcus gallinarum,Erysipelotrichaceae bacterium 3_1_53[Enterococcus gallinarum,Escherichia coli[Enterococcus gallinarum,Escherichia fergusonii[Enterococcus gallinarum,Ethanoligenens harbinense[Enterococcus gallinarum,Eubacterium cellulosolvens[Enterococcus gallinarum,Eubacterium eligens[Enterococcus gallinarum,Eubacterium hallii[Enterococcus gallinarum,Eubacterium limosum[Enterococcus gallinarum,Eubacterium rectale[Enterococcus gallinarum,Eubacterium siraeum[Enterococcus gallinarum,Eubacterium ventriosum[Enterococcus gallinarum,Faecalibacterium prausnitzii[Enterococcus gallinarum,Finexgolia magna[Enterococcus gallinarum,Fusobacterium gonidiaformans[Enterococcus gallinarum,Fusobacterium mortiferum[Enterococcus gallinarum,Fusobacterium nucleatum[Enterococcus gallinarum,Fusobacterium varium[Enterococcus gallinarum,Gardnerella vaginalis[Enterococcus gallinarum,Gemella haemolyans[Enterococcus gallinarum,Gemella morbillorum[Enterococcus gallinarum,Gordonibacter pamelaeae[Enterococcus gallinarum,Granulicatella adiacens[Enterococcus gallinarum,Granulicatella elegans[Enterococcus gallinarum,Haemophilus influenzae[Enterococcus gallinarum,Haemophilus parainfluenzae[Enterococcus gallinarum,Helicobacter pullorum[Enterococcus gallinarum,Helicobacter pylori[Enterococcus gallinarum,Holdemania filiformis[Enterococcus gallinarum,Kingella oralis[Enterococcus gallinarum,Klebsiella pneumoniae[Enterococcus gallinarum,Klebsiella varicola[Enterococcus gallinarum,Lachnospiraceae bacterium 5_1_57FAA[Enterococcus gallinarum,Lactobacillus acidophilus[Enterococcus gallinarum,Lactobacillus amylovorus[Enterococcus gallinarum,Lactobacillus brevis[Enterococcus gallinarum,Lactobacillus casei[Enterococcus gallinarum,Lactobacillus crispatus[Enterococcus gallinarum,Lactobacillus delbrueckii[Enterococcus gallinarum,Lactobacillus fermentum[Enterococcus gallinarum,Lactobacillus gasseri[Enterococcus gallinarum,Lactobacillus iners[Enterococcus gallinarum,Lactobacillus jensenii[Enterococcus gallinarum,Lactobacillus johnsonii[Enterococcus gallinarum,Lactobacillus paracasei[Enterococcus gallinarum,Lactobacillus plantarum[Enterococcus gallinarum,Lactobacillus reuteri[Enterococcus gallinarum,Lactobacillus rhamnosus[Enterococcus gallinarum,Lactobacillus ruminis[Enterococcus gallinarum,Lactobacillus sakei[Enterococcus gallinarum,Lactobacillus salivarius[Enterococcus gallinarum,Lactococcus lactis[Enterococcus gallinarum,Lautropia mirabilis[Enterococcus gallinarum,Leuconostoc citreum[Enterococcus gallinarum,Leuconostoc gasicomitatum[Enterococcus gallinarum,Leuconostoc mesenteroides[Enterococcus gallinarum,Listeria monocytogenes[Enterococcus gallinarum,Marvinbryantia formatexigens[Enterococcus gallinarum,Megamonas hypermegale[Enterococcus gallinarum,Megasphaera micronuciformis[Enterococcus gallinarum,Methanobrevibacter smithii[Enterococcus gallinarum,Methanospheera stadmanae[Enterococcus gallinarum,Methylobacterium radiotolerans[Enterococcus gallinarum,Mitsuokella multacida[Enterococcus gallinarum,Mobiluncus curtisii[Enterococcus gallinarum,Mycoplasma hominis[Enterococcus gallinarum,Neisseria mucosa[Enterococcus gallinarum,Odoribacter splanchnicus[Enterococcus gallinarum,Olsenella uli[Enterococcus gallinarum,Oribacterium sinus[Enterococcus gallinarum,Oxalobacter formigenes[Enterococcus gallinarum,Parabacteroides distans[Enterococcus gallinarum,Parabacteroides johnsonii[Enterococcus gallinarum,Parabacteroides merdae[Enterococcus gallinarum,Parvimonas micra[Enterococcus gallinarum,Pediococcus acidilactici[Enterococcus gallinarum,Pediococcus pentosaceus[Enterococcus gallinarum,Peptoniphilus duerdenii[Enterococcus gallinarum,Peptoniphilus harei[Enterococcus gallinarum,Peptoniphilus lacrimalis[Enterococcus gallinarum,Peptostreptococcus anaerobius[Enterococcus gallinarum,Peptostreptococcus stomatis[Enterococcus gallinarum,Porphyromonas asaccharolytica[Enterococcus gallinarum,Porphyromonas uenonis[Enterococcus gallinarum,Prevotella amnii[Enterococcus gallinarum,Prevotella bergensis[Enterococcus gallinarum,Prevotella bivia[Enterococcus gallinarum,Prevotella buccae[Enterococcus gallinarum,Prevotella buccalis[Enterococcus gallinarum,Prevotella copri[Enterococcus gallinarum,Prevotella disiens[Enterococcus gallinarum,Prevotella melaninogenica[Enterococcus gallinarum,Prevotella multiformis[Enterococcus gallinarum,Prevotella oralis[Enterococcus gallinarum,Prevotella oris[Enterococcus gallinarum,Prevotella salivae[Enterococcus gallinarum,Prevotella timonensis[Enterococcus gallinarum,Propionibacterium acnes[Enterococcus gallinarum,Propionibacterium freudenreichii[Enterococcus gallinarum,Proteus mirabilis[Enterococcus gallinarum,Proteus penneri[Enterococcus gallinarum,Pseudoflavonifractor capillosus[Enterococcus gallinarum,Pseudomonas aeruginosa[Enterococcus gallinarum,Pseudomonas fluorescens[Enterococcus gallinarum,Pseudomonas putida[Enterococcus gallinarum,Pseudoramibacter alactolyticus[Enterococcus gallinarum,Pyramidobacter piscolens[Enterococcus gallinarum,Rhodopseudomonas palustris[Enterococcus gallinarum,Roseburia intestinalis[Enterococcus gallinarum,Roseburia inulinivorans[Enterococcus gallinarum,Rothia dentocariosa[Enterococcus gallinarum,Rothia mucilaginosa[Enterococcus gallinarum,Ruminococcus albus[Enterococcus gallinarum,Ruminococcus bromii[Enterococcus gallinarum,Ruminococcus gnavus[Enterococcus gallinarum,Ruminococcus lactaris[Enterococcus gallinarum,Ruminococcus obeum[Enterococcus gallinarum,Ruminococcus torques[Enterococcus gallinarum,Selenomonas sputigena[Enterococcus gallinarum,Shigella boydii[Enterococcus gallinarum,Shigella dysenteriae[Enterococcus gallinarum,Shigella sonnei[Enterococcus gallinarum,Slackia exigua[Enterococcus gallinarum,Solobacterium moorei[Enterococcus gallinarum,Staphylococcus aureus[Enterococcus gallinarum,Staphylococcus epidermidis[Enterococcus gallinarum,Staphylococcus hominis[Enterococcus gallinarum,Staphylococcus saprophyticus[Enterococcus gallinarum,Staphylococcus warneri[Enterococcus gallinarum,Streptococcus agalactiae[Enterococcus gallinarum,Streptococcus anginosus[Enterococcus gallinarum,Streptococcus dysgalactiae[Enterococcus gallinarum,Streptococcus equinus[Enterococcus gallinarum,Streptococcus gordonii[Enterococcus gallinarum,Streptococcus infantarius[Enterococcus gallinarum,Streptococcus infantis[Enterococcus gallinarum,Streptococcus mitis[Enterococcus gallinarum,Streptococcus mutans[Enterococcus gallinarum,Streptococcus pneumoniae[Enterococcus gallinarum,Streptococcus salivarius[Enterococcus gallinarum,Streptococcus sanguinis[Enterococcus gallinarum,Streptococcus peroris[Enterococcus gallinarum,Streptococcus vestibularis[Enterococcus gallinarum,Streptococcus thermophilus[Enterococcus gallinarum,Streptococcus vestibularis[Enterococcus gallinarum,Subdoligranulum variable[Enterococcus gallinarum,Succinatimonas hippei[Enterococcus gallinarum,Sutterella wadsworthensis[Enterococcus gallinarum,Tropheryma whipplei[Enterococcus gallinarum,Veillonella atypica[Enterococcus gallinarum,Veillonella dispar[Enterococcus gallinarum,Veillonella parvula[Enterococcus gallinarum,Victivallis vadensis[Enterococcus gallinarum,Erysipelotrichaceae bacterium 3_1_53,Erysipelotrichaceae bacterium 3_1_53,Erysipelotrichaceae bacterium 3_1_53,Erysipelotrichaceae bacterium 3_1_53,Escherichia coli[Enterococcus gallinarum,Escherichia fergusonii[Enterococcus gallinarum,Ethanoligenens harbinense[Enterococcus gallinarum,Eubacterium cellulosolvens[Enterococcus gallinarum,Eubacterium eligens[Enterococcus gallinarum,Eubacterium hallii[Enterococcus gallinarum,Eubacterium limosum[Enterococcus gallinarum,Eubacterium rectale[Enterococcus gallinarum,Eubacterium siraeum[Enterococcus gallinarum,Eubacterium ventriosum[Enterococcus gallinarum,Faecalibacterium prausnitzii[Enterococcus gallinarum,Finexgolia magna[Enterococcus gallinarum,Erysipelotrichaceae bacterium 3_1_53,Fusobacterium gonidiaformans[Enterococcus gallinarum,Fusobacterium mortiferum[Enterococcus gallinarum,Fusobacterium nucleatum[Enterococcus gallinarum,Fusobacterium varium[Enterococcus gallinarum,Gardnerella vaginalis[Enterococcus gallinarum,Gemella haemolyans[Enterococcus gallinarum,Gemella morbillorum[Enterococcus gallinarum,Gordonibacter pamelaeae[Enterococcus gallinarum,Granulicatella adiacens[Enterococcus gallinarum,Granulicatella elegans[Enterococcus gallinarum,Haemophilus influenzae[Enterococcus gallinarum,Haemophilus parainfluenzae[Enterococcus gallinarum,Helicobacter pullorum[Enterococcus gallinarum,Helicobacter pylori[Enterococcus gallinarum,Holdemania filiformis[Enterococcus gallinarum,Kingella oralis[Enterococcus gallinarum,Klebsiella pneumoniae[Enterococcus gallinarum,Klebsiella varicola[Enterococcus gallinarum,Lachnospiraceae bacterium 3_1_53,Lachnospiraceae bacterium 5_1_57FAA[Enterococcus gallinarum,Lactobacillus acidophilus[Enterococcus gallinarum,Lactobacillus amylovorus[Enterococcus gallinarum,Lactobacillus brevis[Enterococcus gallinarum,Lactobacillus casei[Enterococcus gallinarum,Lactobacillus crispatus[Enterococcus gallinarum,Lactobacillus delbrueckii[Enterococcus gallinarum,Lactobacillus fermentum[Enterococcus gallinarum,Lactobacillus gasseri[Enterococcus gallinarum,Lactobacillus iners[Enterococcus gallinarum,Lactobacillus jensenii[Enterococcus gallinarum,Lactobacillus johnsonii[Enterococcus gallinarum,Lactobacillus paracasei[Enterococcus gallinarum,Lactobacillus plantarum[Enterococcus gallinarum,Lactobacillus reuteri[Enterococcus gallinarum,Lactobacillus rhamnosus[Enterococcus gallinarum,Lactobacillus ruminis[Enterococcus gallinarum,Lactobacillus sakei[Enterococcus gallinarum,Lactobacillus salivarius[Enterococcus gallinarum,Lactococcus lactis[Enterococcus gallinarum,Lautropia mirabilis[Enterococcus gallinarum,Leuconostoc citreum[Enterococcus gallinarum,Leuconostoc gasicomitatum[Enterococcus gallinarum,Leuconostoc mesenteroides[Enterococcus gallinarum,Listeria monocytogenes[Enterococcus gallinarum,Marvinbryantia formatexigens[Enterococcus gallinarum,Megamonas hypermegale[Enterococcus gallinarum,Megasphaera micronuciformis[Enterococcus gallinarum,Methanobrevibacter smithii[Enterococcus gallinarum,Methanospheera stadmanae[Enterococcus gallinarum,Methylobacterium radiotolerans[Enterococcus gallinarum,Mitsuokella multacida[Enterococcus gallinarum,Mobiluncus curtisii[Enterococcus gallinarum,Mycoplasma hominis[Enterococcus gallinarum,Neisseria mucosa[Enterococcus gallinarum,Odoribacter splanchnicus[Enterococcus gallinarum,Olsenella uli[Enterococcus gallinarum,Oribacterium sinus[Enterococcus gallinarum,Oxalobacter formigenes[Enterococcus gallinarum,Parabacteroides distans[Enterococcus gallinarum,Parabacteroides johnsonii[Enterococcus gallinarum,Parabacteroides merdae[Enterococcus gallinarum,Parvimonas micra[Enterococcus gallinarum,Pediococcus acidilactici[Enterococcus gallinarum,Pediococcus pentosaceus[Enterococcus gallinarum,Peptoniphilus duerdenii[Enterococcus gallinarum,Peptoniphilus harei[Enterococcus gallinarum,Peptoniphilus lacrimalis[Enterococcus gallinarum,Peptostreptococcus anaerobius[Enterococcus gallinarum,Peptostreptococcus stomatis[Enterococcus gallinarum,Porphyromonas asaccharolytica[Enterococcus gallinarum,Porphyromonas uenonis[Enterococcus gallinarum,Prevotella amnii[Enterococcus gallinarum,Prevotella bergensis[Enterococcus gallinarum,Prevotella bivia[Enterococcus gallinarum,Prevotella buccae[Enterococcus gallinarum,Prevotella buccalis[Enterococcus gallinarum,Prevotella copri[Enterococcus gallinarum,Prevotella disiens[Enterococcus gallinarum,Prevotella melaninogenica[Enterococcus gallinarum,Prevotella multiformis[Enterococcus gallinarum,Prevotella oralis[Enterococcus gallinarum,Prevotella oris[Enterococcus gallinarum,Prevotella salivae[Enterococcus gallinarum,Prevotella timonensis[Enterococcus gallinarum,Propionibacterium acnes[Enterococcus gallinarum,Propionibacterium freudenreichii[Enterococcus gallinarum,Proteus mirabilis[Enterococcus gallinarum,Proteus penneri[Enterococcus gallinarum,Pseudoflavonifractor capillosus[Enterococcus gallinarum,Pseudomonas aeruginosa[Enterococcus gallinarum,Pseudomonas fluorescens[Enterococcus gallinarum,Pseudomonas putida[Enterococcus gallinarum,Pseudoramibacter alactolyticus[Enterococcus gallinarum,Pyramidobacter piscolens[Enterococcus gallinarum,Rhodopseudomonas palustris[Enterococcus gallinarum,Roseburia intestinalis[Enterococcus gallinarum,Roseburia inulinivorans[Enterococcus gallinarum,Rothia dentocariosa[Enterococcus gallinarum,Rothia mucilaginosa[Enterococcus gallinarum,Ruminococcus albus[Enterococcus gallinarum,Ruminococcus bromii[Enterococcus gallinarum,Ruminococcus gnavus[Enterococcus gallinarum,Ruminococcus lactaris[Enterococcus gallinarum,Ruminococcus obeum[Enterococcus gallinarum,Ruminococcus torques[Enterococcus gallinarum,Selenomonas sputigena[Enterococcus gallinarum,Shigella boydii[Enterococcus gallinarum,Shigella dysenteriae[Enterococcus gallinarum,Shigella sonnei[Enterococcus gallinarum,Slackia exigua[Enterococcus gallinarum,Solobacterium moorei[Enterococcus gallinarum,Staphylococcus aureus[Enterococcus gallinarum,Staphylococcus epidermidis[Enterococcus gallinarum,Staphylococcus hominis[Enterococcus gallinarum,Staphylococcus saprophyticus[Enterococcus gallinarum,Staphylococcus warneri[Enterococcus gallinarum,Streptococcus agalactiae[Enterococcus gallinarum,Streptococcus anginosus[Enterococcus gallinarum,Streptococcus dysgalactiae[Enterococcus gallinarum,Streptococcus equinus[Enterococcus gallinarum,Streptococcus gordonii[Enterococcus gallinarum,Streptococcus infantarius[Enterococcus gallinarum,Streptococcus infantis[Enterococcus gallinarum,Streptococcus mitis[Enterococcus gallinarum,Streptococcus mutans[Enterococcus gallinarum,Streptococcus pneumoniae[Enterococcus gallinarum,Streptococcus salivarius[Enterococcus gallinarum,Streptococcus sanguinis[Enterococcus gallinarum,Streptococcus peroris[Enterococcus gallinarum,Streptococcus vestibularis[Enterococcus gallinarum,Streptococcus thermophilus[Enterococcus gallinarum,Streptococcus vestibularis[Enterococcus gallinarum,Subdoligranulum

159

harbinense, Shigella boydii[Ethanoligenens harbinense, Shigella dysenteriae[Ethanoligenens harbinense, Shigella sonnei[Ethanoligenens harbinense, Slackia exigua[Ethanoligenens harbinense, Solobacterium moorei[Ethanoligenens harbinense, Staphylococcus aureus[Ethanoligenens harbinense, Staphylococcus epidermidis[Ethanoligenens harbinense, Staphylococcus hominis[Ethanoligenens harbinense, Staphylococcus saprophyticus[Ethanoligenens harbinense, Staphylococcus warneri[Ethanoligenens harbinense, Streptococcus agalactiae[Ethanoligenens harbinense, Streptococcus anginosus[Ethanoligenens harbinense, Streptococcus australis[Ethanoligenens harbinense, Streptococcus bovis[Ethanoligenens harbinense, Streptococcus cristatus[Ethanoligenens harbinense, Streptococcus dysgalactiae[Ethanoligenens harbinense, Streptococcus equinus[Ethanoligenens harbinense, Streptococcus gordonii[Ethanoligenens harbinense, Streptococcus infantaris[Ethanoligenens harbinense, Streptococcus infantis[Ethanoligenens harbinense, Streptococcus mitis[Ethanoligenens harbinense, Streptococcus mutans[Ethanoligenens harbinense, Streptococcus oralis[Ethanoligenens harbinense, Streptococcus parasanguinis[Ethanoligenens harbinense, Streptococcus peroris[Ethanoligenens harbinense, Streptococcus pneumoniae[Ethanoligenens harbinense, Streptococcus salivarius[Ethanoligenens harbinense, Streptococcus sanguinis[Ethanoligenens harbinense, Streptococcus sanguinis[Ethanoligenens harbinense, Streptococcus thermophilus[Ethanoligenens harbinense, Streptococcus vestibularis[Ethanoligenens harbinense, Streptococcus variabile[Ethanoligenens harbinense, Veillonella atypica[Ethanoligenens harbinense, Veillonella dispar[Ethanoligenens harbinense, Veillonella parvula[Ethanoligenens harbinense, Veillonella vadsensis[Ethanoligenens harbinense, Victivallis vadensis[Ethanoligenens harbinense, Eubacterium cellulosolvens, Eubacterium cellulosolvens[Eubacterium cellulosolvens, Eubacterium eligens[Eubacterium cellulosolvens, Eubacterium hallii[Eubacterium cellulosolvens, Eubacterium limosum[Eubacterium cellulosolvens, Eubacterium rectale[Eubacterium cellulosolvens, Eubacterium siraeum[Eubacterium cellulosolvens, Eubacterium ventriosum[Eubacterium cellulosolvens, Faecalibacterium prausnitzii[Eubacterium cellulosolvens, Finegoldia magna[Eubacterium cellulosolvens, Fusobacterium gonidiaformans[Eubacterium cellulosolvens, Fusobacterium mortiferum[Eubacterium cellulosolvens, Fusobacterium nucleatum[Eubacterium cellulosolvens, Fusobacterium varium[Eubacterium cellulosolvens, Gardnerella vaginalis[Eubacterium cellulosolvens, Gemella haemolysans[Eubacterium cellulosolvens, Gemella morbillorum[Eubacterium cellulosolvens, Gordonibacter panelae[Eubacterium cellulosolvens, Granulicatella adiacens[Eubacterium cellulosolvens, Granulicatella elegans[Eubacterium cellulosolvens, Haemophilus influenzae[Eubacterium cellulosolvens, Haemophilus parainfluenzae[Eubacterium cellulosolvens, Helicobacter pylori[Eubacterium cellulosolvens, Helicobacter pylori[Eubacterium cellulosolvens, Holdemania filiformis[Eubacterium cellulosolvens, Kingella oralis[Eubacterium cellulosolvens, Klebsiella pneumoniae[Eubacterium cellulosolvens, Klebsiella varicola[Eubacterium cellulosolvens, Lachnospiraceae bacterium 5_1_57FAA[Eubacterium cellulosolvens, Lactobacillus acidophilus[Eubacterium cellulosolvens, Lactobacillus amylovorus[Eubacterium cellulosolvens, Lactobacillus brevis[Eubacterium cellulosolvens, Lactobacillus casei[Eubacterium cellulosolvens, Lactobacillus crispatus[Eubacterium cellulosolvens, Lactobacillus delbrueckii[Eubacterium cellulosolvens, Lactobacillus fermentum[Eubacterium cellulosolvens, Lactobacillus gasseri[Eubacterium cellulosolvens, Lactobacillus iners[Eubacterium cellulosolvens, Lactobacillus jensenii[Eubacterium cellulosolvens, Lactobacillus johnsonii[Eubacterium cellulosolvens, Lactobacillus paracasei[Eubacterium cellulosolvens, Lactobacillus plantarum[Eubacterium cellulosolvens, Lactobacillus reuteri[Eubacterium cellulosolvens, Lactobacillus rhamnosus[Eubacterium cellulosolvens, Lactobacillus ruminis[Eubacterium cellulosolvens, Lactobacillus sakei[Eubacterium cellulosolvens, Lactobacillus salivarius[Eubacterium cellulosolvens, Lactococcus lactis[Eubacterium cellulosolvens, Lautropia mirabilis[Eubacterium cellulosolvens, Leuconostoc citreum[Eubacterium cellulosolvens, Leuconostoc gasicomitatum[Eubacterium cellulosolvens, Leuconostoc mesenteroides[Eubacterium cellulosolvens, Listeria monocytogenes[Eubacterium cellulosolvens, Marvinbryantia formatexigens[Eubacterium cellulosolvens, Megamonas hypermegale[Eubacterium cellulosolvens, Megasphaera micronuciformis[Eubacterium cellulosolvens, Methanobrevibacter smithii[Eubacterium cellulosolvens, Methanospaera stadmanae[Eubacterium cellulosolvens, Methylobacterium radiotolerans[Eubacterium cellulosolvens, Mitsukella multacida[Eubacterium cellulosolvens, Mobiluncus curtisii[Eubacterium cellulosolvens, Mycoplasma hominis[Eubacterium cellulosolvens, Neisseria mucosa[Eubacterium cellulosolvens, Odoribacter splanchnicus[Eubacterium cellulosolvens, Olsenella uli[Eubacterium cellulosolvens, Oribacterium sinus[Eubacterium cellulosolvens, Oxalobacter formigenes[Eubacterium cellulosolvens, Parabacteroides distans[Eubacterium cellulosolvens, Parabacteroides johnsonii[Eubacterium cellulosolvens, Parabacteroides merdae[Eubacterium cellulosolvens, Parvimonas micra[Eubacterium cellulosolvens, Pediococcus acidilactici[Eubacterium cellulosolvens, Pediococcus pentosaceus[Eubacterium cellulosolvens, Peptoniphilus duerdenii[Eubacterium cellulosolvens, Peptoniphilus harei[Eubacterium cellulosolvens, Peptoniphilus lacrimalis[Eubacterium cellulosolvens, Peptostreptococcus anaerobius[Eubacterium cellulosolvens, Peptostreptococcus stomatis[Eubacterium cellulosolvens, Porphyromonas asaccharolytica[Eubacterium cellulosolvens, Porphyromonas uenonis[Eubacterium cellulosolvens, Prevotella amnii[Eubacterium cellulosolvens, Prevotella bergensis[Eubacterium cellulosolvens, Prevotella bivia[Eubacterium cellulosolvens, Prevotella buccae[Eubacterium cellulosolvens, Prevotella buccalis[Eubacterium cellulosolvens, Prevotella copri[Eubacterium cellulosolvens, Prevotella disjens[Eubacterium cellulosolvens, Prevotella melaninogenica[Eubacterium cellulosolvens, Prevotella multifornis[Eubacterium cellulosolvens, Prevotella oralis[Eubacterium cellulosolvens, Prevotella oris[Eubacterium cellulosolvens, Prevotella salivae[Eubacterium cellulosolvens, Prevotella timonensis[Eubacterium cellulosolvens, Propionibacterium acnes[Eubacterium cellulosolvens, Propionibacterium freudenreichii[Eubacterium cellulosolvens, Proteus mirabilis[Eubacterium cellulosolvens, Proteus penneri[Eubacterium cellulosolvens, Pseudoflavonifractor capillosus[Eubacterium cellulosolvens, Pseudomonas aeruginosa[Eubacterium cellulosolvens, Pseudomonas fluorescens[Eubacterium cellulosolvens, Pseudomonas putida[Eubacterium cellulosolvens, Pseudoramibacter alactolyticus[Eubacterium cellulosolvens, Pyramidobacter piscoles[Eubacterium cellulosolvens, Rhodopseudomonas palustris[Eubacterium cellulosolvens, Roseburia intestinalis[Eubacterium cellulosolvens, Roseburia inulinivorans[Eubacterium cellulosolvens, Rothia dentocariosa[Eubacterium cellulosolvens, Rothia mucilaginosa[Eubacterium cellulosolvens, Ruminococcus albus[Eubacterium cellulosolvens, Ruminococcus bromii[Eubacterium cellulosolvens, Ruminococcus gnavus[Eubacterium cellulosolvens, Ruminococcus lactaris[Eubacterium cellulosolvens, Ruminococcus obeum[Eubacterium cellulosolvens, Ruminococcus torques[Eubacterium cellulosolvens, Selenomonas sputigana[Eubacterium cellulosolvens, Shigella boydii[Eubacterium cellulosolvens, Shigella dysenteriae[Eubacterium cellulosolvens, Shigella sonnei[Eubacterium cellulosolvens, Slackia exigua[Eubacterium cellulosolvens, Solobacterium moorei[Eubacterium cellulosolvens, Staphylococcus aureus[Eubacterium cellulosolvens, Staphylococcus epidermidis[Eubacterium cellulosolvens, Staphylococcus hominis[Eubacterium cellulosolvens, Staphylococcus saprophyticus[Eubacterium cellulosolvens, Staphylococcus warneri[Eubacterium cellulosolvens, Streptococcus agalactiae[Eubacterium cellulosolvens, Streptococcus anginosus[Eubacterium cellulosolvens, Streptococcus equinus[Eubacterium cellulosolvens, Streptococcus gordonii[Eubacterium cellulosolvens, Streptococcus infantaris[Eubacterium cellulosolvens, Streptococcus infantis[Eubacterium cellulosolvens, Streptococcus mitis[Eubacterium cellulosolvens, Streptococcus mutans[Eubacterium cellulosolvens, Streptococcus oralis[Eubacterium cellulosolvens, Streptococcus parasanguinis[Eubacterium cellulosolvens, Streptococcus peroris[Eubacterium cellulosolvens, Streptococcus pneumoniae[Eubacterium cellulosolvens, Streptococcus salivarius[Eubacterium cellulosolvens, Streptococcus sanguinis[Eubacterium cellulosolvens, Streptococcus thermophilus[Eubacterium cellulosolvens, Streptococcus vestibularis[Eubacterium cellulosolvens, Subdoligranulum variabile[Eubacterium cellulosolvens, Succinatimonas hippei[Eubacterium cellulosolvens, Sutterella wadsworthensis[Eubacterium cellulosolvens, Tropheryma whippelii[Eubacterium cellulosolvens, Veillonella atypica[Eubacterium cellulosolvens, Veillonella dispar[Eubacterium cellulosolvens, Veillonella parvula[Eubacterium cellulosolvens, Victivallis vadensis[Eubacterium cellulosolvens, Eubacterium eligens, Eubacterium eligens[Eubacterium eligens, Eubacterium hallii[Eubacterium eligens, Eubacterium limosum[Eubacterium eligens, Eubacterium rectale[Eubacterium eligens, Eubacterium siraeum[Eubacterium eligens, Eubacterium ventriosum[Eubacterium eligens, Faecalibacterium prausnitzii[Eubacterium eligens, Finegoldia magna[Eubacterium eligens, Fusobacterium gonidiaformans[Eubacterium eligens, Fusobacterium mortiferum[Eubacterium eligens, Fusobacterium nucleatum[Eubacterium eligens, Fusobacterium varium[Eubacterium eligens, Gardnerella vaginalis[Eubacterium eligens, Gemella haemolysans[Eubacterium eligens, Gemella morbillorum[Eubacterium eligens, Gordonibacter panelae[Eubacterium eligens, Granulicatella adiacens[Eubacterium eligens, Granulicatella elegans[Eubacterium eligens, Haemophilus influenzae[Eubacterium eligens, Haemophilus parainfluenzae[Eubacterium eligens, Helicobacter pylori[Eubacterium eligens, Helicobacter pylori[Eubacterium eligens, Holdemania filiformis[Eubacterium eligens, Kingella oralis[Eubacterium eligens, Klebsiella pneumoniae[Eubacterium eligens, Klebsiella varicola[Eubacterium eligens, Lachnospiraceae bacterium 5_1_57FAA[Eubacterium eligens, Lactobacillus acidophilus[Eubacterium eligens, Lactobacillus amylovorus[Eubacterium eligens, Lactobacillus brevis[Eubacterium eligens, Lactobacillus casei[Eubacterium eligens, Lactobacillus crispatus[Eubacterium eligens, Lactobacillus delbrueckii[Eubacterium eligens, Lactobacillus fermentum[Eubacterium eligens, Lactobacillus gasseri[Eubacterium eligens, Lactobacillus iners[Eubacterium eligens, Lactobacillus jensenii[Eubacterium eligens, Lactobacillus johnsonii[Eubacterium eligens, Lactobacillus paracasei[Eubacterium eligens, Lactobacillus plantarum[Eubacterium eligens, Lactobacillus reuteri[Eubacterium eligens, Lactobacillus rhamnosus[Eubacterium eligens, Lactobacillus ruminis[Eubacterium eligens, Lactobacillus sakei[Eubacterium eligens, Lactobacillus salivarius[Eubacterium eligens, Lactococcus lactis[Eubacterium eligens, Lautropia mirabilis[Eubacterium eligens, Leuconostoc citreum[Eubacterium eligens, Leuconostoc gasicomitatum[Eubacterium eligens, Leuconostoc mesenteroides[Eubacterium eligens, Listeria monocytogenes[Eubacterium eligens, Marvinbryantia formatexigens[Eubacterium eligens, Megamonas hypermegale[Eubacterium eligens, Megasphaera micronuciformis[Eubacterium eligens, Methanobrevibacter smithii[Eubacterium eligens, Methanospaera stadmanae[Eubacterium eligens, Methylobacterium radiotolerans[Eubacterium eligens, Mitsukella multacida[Eubacterium eligens, Mobiluncus curtisii[Eubacterium eligens, Mycoplasma hominis[Eubacterium eligens, Neisseria mucosa[Eubacterium eligens, Odoribacter splanchnicus[Eubacterium eligens, Olsenella uli[Eubacterium eligens, Oribacterium sinus[Eubacterium eligens, Oxalobacter formigenes[Eubacterium eligens, Parabacteroides distans[Eubacterium eligens, Parabacteroides johnsonii[Eubacterium eligens, Parabacteroides merdae[Eubacterium eligens, Parvimonas micra[Eubacterium eligens, Pediococcus acidilactici[Eubacterium eligens, Pediococcus pentosaceus[Eubacterium eligens, Peptoniphilus duerdenii[Eubacterium eligens, Peptoniphilus harei[Eubacterium eligens, Peptoniphilus lacrimalis[Eubacterium eligens, Peptostreptococcus anaerobius[Eubacterium eligens, Peptostreptococcus stomatis[Eubacterium eligens, Porphyromonas asaccharolytica[Eubacterium eligens, Porphyromonas uenonis[Eubacterium eligens, Prevotella amnii[Eubacterium eligens, Prevotella bergensis[Eubacterium eligens, Prevotella bivia[Eubacterium eligens, Prevotella buccae[Eubacterium eligens, Prevotella buccalis[Eubacterium eligens, Prevotella copri[Eubacterium eligens, Prevotella disjens[Eubacterium eligens, Prevotella melaninogenica[Eubacterium eligens, Prevotella multifornis[Eubacterium eligens, Prevotella oralis[Eubacterium eligens, Prevotella oris[Eubacterium eligens, Prevotella salivae[Eubacterium eligens, Prevotella timonensis[Eubacterium eligens, Propionibacterium acnes[Eubacterium eligens, Propionibacterium freudenreichii[Eubacterium eligens, Proteus mirabilis[Eubacterium eligens, Proteus penneri[Eubacterium eligens, Pseudoflavonifractor capillosus[Eubacterium eligens, Pseudomonas aeruginosa[Eubacterium eligens, Pseudomonas fluorescens[Eubacterium eligens, Pseudomonas putida[Eubacterium eligens, Pseudoramibacter alactolyticus[Eubacterium eligens, Pyramidobacter piscoles[Eubacterium eligens, Rhodopseudomonas palustris[Eubacterium eligens, Roseburia intestinalis[Eubacterium eligens, Roseburia inulinivorans[Eubacterium eligens, Rothia dentocariosa[Eubacterium eligens, Rothia mucilaginosa[Eubacterium eligens, Ruminococcus albus[Eubacterium eligens, Ruminococcus bromii[Eubacterium eligens, Ruminococcus gnavus[Eubacterium eligens, Ruminococcus lactaris[Eubacterium eligens, Ruminococcus obeum[Eubacterium eligens, Ruminococcus torques[Eubacterium eligens, Selenomonas sputigana[Eubacterium eligens, Shigella boydii[Eubacterium eligens, Shigella dysenteriae[Eubacterium eligens, Shigella sonnei[Eubacterium eligens, Slackia exigua[Eubacterium eligens, Solobacterium moorei[Eubacterium eligens, Staphylococcus aureus[Eubacterium eligens, Staphylococcus epidermidis[Eubacterium eligens, Staphylococcus hominis[Eubacterium eligens, Staphylococcus saprophyticus[Eubacterium eligens, Staphylococcus warneri[Eubacterium eligens, Streptococcus agalactiae[Eubacterium eligens, Streptococcus anginosus[Eubacterium eligens, Streptococcus bovis[Eubacterium eligens, Streptococcus cristatus[Eubacterium eligens, Streptococcus dysgalactiae[Eubacterium eligens, Streptococcus equinus[Eubacterium eligens, Streptococcus gordonii[Eubacterium eligens, Streptococcus infantaris[Eubacterium eligens, Streptococcus infantis[Eubacterium eligens, Streptococcus mitis[Eubacterium eligens, Streptococcus mutans[Eubacterium eligens, Streptococcus oralis[Eubacterium eligens, Streptococcus parasanguinis[Eubacterium eligens, Streptococcus peroris[Eubacterium eligens, Streptococcus pneumoniae[Eubacterium eligens, Streptococcus salivarius[Eubacterium eligens, Streptococcus sanguinis[Eubacterium eligens, Streptococcus thermophilus[Eubacterium eligens, Streptococcus vestibularis[Eubacterium eligens, Subdoligranulum variabile[Eubacterium eligens, Succinatimonas hippei[Eubacterium eligens, Sutterella wadsworthensis[Eubacterium eligens, Tropheryma whippelii[Eubacterium eligens, Veillonella atypica[Eubacterium eligens, Veillonella dispar[Eubacterium eligens, Veillonella parvula[Eubacterium eligens, Victivallis vadensis[Eubacterium hallii[Eubacterium hallii[Eubacterium limosum[Eubacterium hallii[Eubacterium rectale[Eubacterium hallii[Eubacterium siraeum[Eubacterium hallii[Eubacterium ventriosum[Eubacterium hallii[Eubacterium eligens, Faecalibacterium prausnitzii[Eubacterium hallii[Eubacterium eligens, Finegoldia magna[Eubacterium hallii[Eubacterium eligens, Fusobacterium gonidiaformans[Eubacterium hallii[Eubacterium mortiferum[Eubacterium hallii[Eubacterium nucleatum[Eubacterium hallii[Eubacterium varium[Eubacterium hallii[Eubacterium eligens, Gardnerella vaginalis[Eubacterium hallii[Eubacterium eligens, Gemella haemolysans[Eubacterium hallii[Eubacterium morbillorum[Eubacterium hallii[Eubacterium eligens, Gordonibacter panelae[Eubacterium hallii[Eubacterium eligens, Granulicatella adiacens[Eubacterium hallii[Eubacterium eligens, Granulicatella elegans[Eubacterium hallii[Eubacterium eligens, Haemophilus influenzae[Eubacterium hallii[Eubacterium eligens, Haemophilus parainfluenzae[Eubacterium hallii[Eubacterium eligens, Helicobacter pylori[Eubacterium hallii[Eubacterium eligens, Helicobacter pylori[Eubacterium hallii[Eubacterium eligens, Holdemania filiformis[Eubacterium hallii[Eubacterium eligens, Kingella oralis[Eubacterium hallii[Eubacterium eligens, Klebsiella pneumoniae[Eubacterium hallii[Eubacterium eligens, Klebsiella varicola[Eubacterium hallii[Eubacterium eligens, Lachnospiraceae bacterium 5_1_57FAA[Eubacterium hallii[Eubacterium eligens, Lactobacillus acidophilus[Eubacterium hallii[Eubacterium eligens, Lactobacillus amylovorus[Eubacterium hallii[Eubacterium eligens, Lactobacillus brevis[Eubacterium hallii[Eubacterium eligens, Lactobacillus casei[Eubacterium hallii[Eubacterium eligens, Lactobacillus crispatus[Eubacterium hallii[Eubacterium eligens, Lactobacillus delbrueckii[Eubacterium hallii[Eubacterium eligens, Lactobacillus fermentum[Eubacterium hallii[Eubacterium eligens, Lactobacillus gasseri[Eubacterium hallii[Eubacterium eligens, Lactobacillus iners[Eubacterium hallii[Eubacterium eligens, Lactobacillus jensenii[Eubacterium hallii[Eubacterium eligens, Lactobacillus johnsonii[Eubacterium hallii[Eubacterium eligens, Lactobacillus paracasei[Eubacterium hallii[Eubacterium eligens, Lactobacillus plantarum[Eubacterium hallii[Eubacterium eligens, Lactobacillus reuteri[Eubacterium hallii[Eubacterium eligens, Lactobacillus rhamnosus[Eubacterium hallii[Eubacterium eligens, Lactobacillus ruminis[Eubacterium hallii[Eubacterium eligens, Lactobacillus sakei[Eubacterium hallii[Eubacterium eligens, Lactobacillus salivarius[Eubacterium hallii[Eubacterium eligens, Lactococcus lactis[Eubacterium hallii[Eubacterium eligens, Lautropia mirabilis[Eubacterium hallii[Eubacterium eligens, Leuconostoc citreum[Eubacterium hallii[Eubacterium eligens, Leuconostoc gasicomitatum[Eubacterium hallii[Eubacterium eligens, Leuconostoc mesenteroides[Eubacterium hallii[Eubacterium eligens, Listeria monocytogenes[Eubacterium hallii[Eubacterium eligens, Marvinbryantia formatexigens[Eubacterium hallii[Eubacterium eligens, Megamonas hypermegale[Eubacterium hallii[Eubacterium eligens, Megasphaera micronuciformis[Eubacterium hallii[Eubacterium eligens, Methanobrevibacter smithii[Eubacterium hallii[Eubacterium eligens, Methanospaera stadmanae[Eubacterium hallii[Eubacterium eligens, Methylobacterium radiotolerans[Eubacterium hallii[Eubacterium eligens, Mitsukella multacida[Eubacterium hallii[Eubacterium eligens, Mobiluncus curtisii[Eubacterium hallii[Eubacterium eligens, Mycoplasma hominis[Eubacterium hallii[Eubacterium eligens, Neisseria mucosa[Eubacterium hallii[Eubacterium eligens, Odoribacter splanchnicus[Eubacterium hallii[Eubacterium eligens, Olsenella uli[Eubacterium hallii[Eubacterium eligens, Oribacterium sinus[Eubacterium hallii[Eubacterium eligens, Oxalobacter formigenes[Eubacterium hallii[Eubacterium eligens, Parabacteroides distans[Eubacterium hallii[Eubacterium eligens, Parabacteroides johnsonii[Eubacterium hallii[Eubacterium eligens, Parabacteroides merdae[Eubacterium hallii[Eubacterium eligens, Parvimonas micra[Eubacterium hallii[Eubacterium eligens, Pediococcus acidilactici[Eubacterium hallii[Eubacterium eligens, Pediococcus pentosaceus[Eubacterium hallii[Eubacterium eligens, Peptoniphilus duerdenii[Eubacterium hallii[Eubacterium eligens, Peptoniphilus harei[Eubacterium

161

162

163

164

vaginalis, Streptococcus vestibularis, Gardnerella vaginalis, Subdoligranulum variabile, Gardnerella vaginalis, Succinatimonas hippei, Gardnerella vaginalis, Sutterella wadsworthensis, Gardnerella vaginalis, Tropheryma whippelii, Gardnerella vaginalis, Veillonella atypica, Gardnerella vaginalis, Veillonella dispar, Gardnerella vaginalis, Veillonella parvula, Gardnerella vaginalis, Victivallis vadensis, Gemella haemolysans, Gemella haemolysans, Gemella morbillorum, Gemella morbillorum, Gordonibacter pamelaee, Gemella haemolysans, Granulicatella adiacens, Gemella haemolysans, Granulicatella elegans, Gemella haemolysans, Haemophilus influenzae, Gemella haemolysans, Haemophilus parainfluenzae, Gemella haemolysans, Helicobacter pullorum, Gemella haemolysans, Helicobacter pylori, Gemella haemolysans, Holdemania filiformis, Gemella haemolysans, Kingella oralis, Gemella haemolysans, Klebsiella pneumoniae, Gemella haemolysans, Klebsiella varicola, Gemella haemolysans, Lachnospiraceae bacterium 5_1_57FAA, Gemella haemolysans, Lactobacillus acidophilus, Gemella haemolysans, Lactobacillus amylovorus, Gemella haemolysans, Lactobacillus brevis, Gemella haemolysans, Lactobacillus casei, Gemella haemolysans, Lactobacillus crispatus, Gemella haemolysans, Lactobacillus delbrueckii, Gemella haemolysans, Lactobacillus fermentum, Gemella haemolysans, Lactobacillus gasseri, Gemella haemolysans, Lactobacillus iners, Gemella haemolysans, Lactobacillus jensenii, Gemella haemolysans, Lactobacillus johnsonii, Gemella haemolysans, Lactobacillus paracasei, Gemella haemolysans, Lactobacillus plantarum, Gemella haemolysans, Lactobacillus reuteri, Gemella haemolysans, Lactobacillus rhamnosus, Gemella haemolysans, Lactobacillus ruminis, Gemella haemolysans, Lactobacillus sakei, Gemella haemolysans, Lactobacillus salivarius, Gemella haemolysans, Lactococcus lactis, Gemella haemolysans, Lautropia mirabilis, Gemella haemolysans, Leuconostoc citreum, Gemella haemolysans, Leuconostoc gascomitatum, Gemella haemolysans, Leuconostoc mesenteroides, Gemella haemolysans, Listeria monocytogenes, Gemella haemolysans, Marvinbryantia formatexigens, Gemella haemolysans, Megamonas hypermegale, Gemella haemolysans, Megasphaera micronuciformis, Gemella haemolysans, Methanobrevibacter smithii, Gemella haemolysans, Methanospaera stadtmannae, Gemella haemolysans, Methylobacterium radiotolerans, Gemella haemolysans, Mitsuokella multacida, Gemella haemolysans, Mobiluncus curtisii, Gemella haemolysans, Mycoplasma hominis, Gemella haemolysans, Neisseria mucosa, Gemella haemolysans, Odoribacter splanchnicus, Gemella haemolysans, Olsenella uli, Gemella haemolysans, Oribacterium sinus, Gemella haemolysans, Oxalobacter formigenes, Gemella haemolysans, Parabacteroides distansoni, Gemella haemolysans, Parabacteroides johnsonii, Gemella haemolysans, Parabacteroides merdae, Gemella haemolysans, Parvimonas micra, Gemella haemolysans, Pediococcus acidilactici, Gemella haemolysans, Pediococcus pentosaceus, Gemella haemolysans, Peptoniphilus duerdenii, Gemella haemolysans, Peptoniphilus harei, Gemella haemolysans, Peptoniphilus lacrimalis, Gemella haemolysans, Peptostreptococcus anaerobius, Gemella haemolysans, Peptostreptococcus stomatis, Gemella haemolysans, Porphyromonas asaccharolytica, Gemella haemolysans, Porphyromonas uenonis, Gemella haemolysans, Prevotella amnii, Gemella haemolysans, Prevotella bergensis, Gemella haemolysans, Prevotella bivia, Gemella haemolysans, Prevotella buccae, Gemella haemolysans, Prevotella buccalis, Gemella haemolysans, Prevotella copri, Gemella haemolysans, Prevotella disiens, Gemella haemolysans, Prevotella melaninogenica, Gemella haemolysans, Prevotella multiformis, Gemella haemolysans, Prevotella oralis, Gemella haemolysans, Prevotella oris, Gemella haemolysans, Prevotella salivae, Gemella haemolysans, Prevotella timonensis, Gemella haemolysans, Propionibacterium acnes, Gemella haemolysans, Propionibacterium freudenreichii, Gemella haemolysans, Proteus mirabilis, Gemella haemolysans, Proteus penneri, Gemella haemolysans, Pseudoflavonifractor capillosus, Gemella haemolysans, Pseudomonas aeruginosa, Gemella haemolysans, Pseudomonas fluorescens, Gemella haemolysans, Pseudomonas putida, Gemella haemolysans, Pseudoramibacter alactolyticus, Gemella haemolysans, Pyramidobacter piscolens, Gemella haemolysans, Rhodospseudomonas palustris, Gemella haemolysans, Roseburia intestinalis, Gemella haemolysans, Roseburia inulinivorans, Gemella haemolysans, Rothia dentocariosa, Gemella haemolysans, Rothia mucilaginosa, Gemella haemolysans, Ruminococcus albus, Gemella haemolysans, Ruminococcus bromii, Gemella haemolysans, Ruminococcus gnavus, Gemella haemolysans, Ruminococcus lactaris, Gemella haemolysans, Ruminococcus obeum, Gemella haemolysans, Ruminococcus torques, Gemella haemolysans, Selenomonas putigena, Gemella haemolysans, Shigella boydii, Gemella haemolysans, Shigella dysenteriae, Gemella haemolysans, Shigella sonnei, Gemella haemolysans, Slackia exigua, Gemella haemolysans, Solobacterium moorei, Gemella haemolysans, Staphylococcus aureus, Gemella haemolysans, Staphylococcus epidermidis, Gemella haemolysans, Staphylococcus hominis, Gemella haemolysans, Staphylococcus saprophyticus, Gemella haemolysans, Streptococcus warneri, Gemella haemolysans, Streptococcus agalactiae, Gemella haemolysans, Streptococcus anginosus, Gemella haemolysans, Streptococcus australis, Gemella haemolysans, Streptococcus bovis, Gemella haemolysans, Streptococcus cristatus, Gemella haemolysans, Streptococcus dysgalactiae, Gemella haemolysans, Streptococcus equinus, Gemella haemolysans, Streptococcus gordonii, Gemella haemolysans, Streptococcus infantarius, Gemella haemolysans, Streptococcus infantis, Gemella haemolysans, Streptococcus mitis, Gemella haemolysans, Streptococcus mutans, Gemella haemolysans, Streptococcus oralis, Gemella haemolysans, Streptococcus parasanguinis, Gemella haemolysans, Streptococcus peroris, Gemella haemolysans, Streptococcus pneumoniae, Gemella haemolysans, Streptococcus salivarius, Gemella haemolysans, Streptococcus sanguinis, Gemella haemolysans, Streptococcus thermophilus, Gemella haemolysans, Streptococcus vestibularis, Gemella haemolysans, Subdoligranulum variabile, Gemella haemolysans, Succinatimonas hippei, Gemella haemolysans, Sutterella wadsworthensis, Gemella haemolysans, Tropheryma whippelii, Gemella haemolysans, Veillonella atypica, Gemella haemolysans, Veillonella dispar, Gemella haemolysans, Veillonella parvula, Gemella haemolysans, Victivallis vadensis, Gemella morbillorum, Gemella morbillorum, Gordonibacter pamelaee, Gemella morbillorum, Granulicatella adiacens, Gemella morbillorum, Granulicatella elegans, Gemella morbillorum, Haemophilus influenzae, Gemella morbillorum, Haemophilus parainfluenzae, Gemella morbillorum, Helicobacter pullorum, Gemella morbillorum, Helicobacter pylori, Gemella morbillorum, Holdemania filiformis, Gemella morbillorum, Kingella oralis, Gemella morbillorum, Klebsiella pneumoniae, Gemella morbillorum, Klebsiella varicola, Gemella morbillorum, Lachnospiraceae bacterium 5_1_57FAA, Gemella morbillorum, Lactobacillus acidophilus, Gemella morbillorum, Lactobacillus amylovorus, Gemella morbillorum, Lactobacillus brevis, Gemella morbillorum, Lactobacillus casei, Gemella morbillorum, Lactobacillus crispatus, Gemella morbillorum, Lactobacillus delbrueckii, Gemella morbillorum, Lactobacillus fermentum, Gemella morbillorum, Lactobacillus gasseri, Gemella morbillorum, Lactobacillus iners, Gemella morbillorum, Lactobacillus jensenii, Gemella morbillorum, Lactobacillus johnsonii, Gemella morbillorum, Lactobacillus paracasei, Gemella morbillorum, Lactobacillus plantarum, Gemella morbillorum, Lactobacillus reuteri, Gemella morbillorum, Lactobacillus rhamnosus, Gemella morbillorum, Lactobacillus ruminis, Gemella morbillorum, Lactobacillus sakei, Gemella morbillorum, Lactobacillus salivarius, Gemella morbillorum, Lactococcus lactis, Gemella morbillorum, Lautropia mirabilis, Gemella morbillorum, Leuconostoc citreum, Gemella morbillorum, Leuconostoc gascomitatum, Gemella morbillorum, Leuconostoc mesenteroides, Gemella morbillorum, Listeria monocytogenes, Gemella morbillorum, Marvinbryantia formatexigens, Gemella morbillorum, Megamonas hypermegale, Gemella morbillorum, Megasphaera micronuciformis, Gemella morbillorum, Methanobrevibacter smithii, Gemella morbillorum, Methanospaera stadtmannae, Gemella morbillorum, Methylobacterium radiotolerans, Gemella morbillorum, Mitsuokella multacida, Gemella morbillorum, Mobiluncus curtisii, Gemella morbillorum, Mycoplasma hominis, Gemella morbillorum, Neisseria mucosa, Gemella morbillorum, Odoribacter splanchnicus, Gemella morbillorum, Olsenella uli, Gemella morbillorum, Oribacterium sinus, Gemella morbillorum, Oxalobacter formigenes, Gemella morbillorum, Parabacteroides distansoni, Gemella morbillorum, Parabacteroides johnsonii, Gemella morbillorum, Parabacteroides merdae, Gemella morbillorum, Parvimonas micra, Gemella morbillorum, Pediococcus acidilactici, Gemella morbillorum, Pediococcus pentosaceus, Gemella morbillorum, Peptoniphilus duerdenii, Gemella morbillorum, Peptoniphilus harei, Gemella morbillorum, Peptoniphilus lacrimalis, Gemella morbillorum, Peptostreptococcus anaerobius, Gemella morbillorum, Peptostreptococcus stomatis, Gemella morbillorum, Porphyromonas asaccharolytica, Gemella morbillorum, Porphyromonas uenonis, Gemella morbillorum, Prevotella amnii, Gemella morbillorum, Prevotella bergensis, Gemella morbillorum, Prevotella bivia, Gemella morbillorum, Prevotella buccae, Gemella morbillorum, Prevotella buccalis, Gemella morbillorum, Prevotella copri, Gemella morbillorum, Prevotella disiens, Gemella morbillorum, Prevotella melaninogenica, Gemella morbillorum, Prevotella multiformis, Gemella morbillorum, Prevotella oralis, Gemella morbillorum, Prevotella oris, Gemella morbillorum, Prevotella salivae, Gemella morbillorum, Prevotella timonensis, Gemella morbillorum, Prevotella multiformis, Gemella morbillorum, Propionibacterium acnes, Gemella morbillorum, Propionibacterium freudenreichii, Gemella morbillorum, Proteus mirabilis, Gemella morbillorum, Proteus penneri, Gemella morbillorum, Pseudoflavonifractor capillosus, Gemella morbillorum, Pseudomonas aeruginosa, Gemella morbillorum, Pseudomonas fluorescens, Gemella morbillorum, Pseudomonas putida, Gemella morbillorum, Pseudoramibacter alactolyticus, Gemella morbillorum, Pyramidobacter piscolens, Gemella morbillorum, Rhodospseudomonas palustris, Gemella morbillorum, Roseburia intestinalis, Gemella morbillorum, Roseburia inulinivorans, Gemella morbillorum, Rothia dentocariosa, Gemella morbillorum, Rothia mucilaginosa, Gemella morbillorum, Ruminococcus albus, Gemella morbillorum, Ruminococcus bromii, Gemella morbillorum, Ruminococcus gnavus, Gemella morbillorum, Ruminococcus lactaris, Gemella morbillorum, Ruminococcus obeum, Gemella morbillorum, Ruminococcus torques, Gemella morbillorum, Selenomonas putigena, Gemella morbillorum, Shigella boydii, Gemella morbillorum, Shigella dysenteriae, Gemella morbillorum, Shigella sonnei, Gemella morbillorum, Slackia exigua, Gemella morbillorum, Solobacterium moorei, Gemella morbillorum, Staphylococcus aureus, Gemella morbillorum, Staphylococcus epidermidis, Gemella morbillorum, Staphylococcus hominis, Gemella morbillorum, Staphylococcus saprophyticus, Gemella morbillorum, Streptococcus warneri, Gemella morbillorum, Streptococcus agalactiae, Gemella morbillorum, Streptococcus anginosus, Gemella morbillorum, Streptococcus australis, Gemella morbillorum, Streptococcus bovis, Gemella morbillorum, Streptococcus cristatus, Gemella morbillorum, Streptococcus dysgalactiae, Gemella morbillorum, Streptococcus equinus, Gemella morbillorum, Streptococcus gordonii, Gemella morbillorum, Streptococcus infantarius, Gemella morbillorum, Streptococcus infantis, Gemella morbillorum, Streptococcus mitis, Gemella morbillorum, Streptococcus mutans, Gemella morbillorum, Streptococcus oralis, Gemella morbillorum, Streptococcus parasanguinis, Gemella morbillorum, Streptococcus peroris, Gemella morbillorum, Streptococcus pneumoniae, Gemella morbillorum, Streptococcus salivarius, Gemella morbillorum, Streptococcus sanguinis, Gemella morbillorum, Streptococcus thermophilus, Gemella morbillorum, Streptococcus vestibularis, Gemella morbillorum, Subdoligranulum variabile, Gemella morbillorum, Succinatimonas hippei, Gemella morbillorum, Sutterella wadsworthensis, Gemella morbillorum, Tropheryma whippelii, Gemella morbillorum, Veillonella atypica, Gemella morbillorum, Veillonella dispar, Gemella morbillorum, Veillonella parvula, Gemella morbillorum, Victivallis vadensis, Gordonibacter pamelaee, Gordonibacter pamelaee, Gordonibacter pamelaee, Granulicatella adiacens, Gordonibacter pamelaee, Granulicatella elegans, Gordonibacter pamelaee, Haemophilus influenzae, Gordonibacter pamelaee, Haemophilus parainfluenzae, Gordonibacter pamelaee, Helicobacter pullorum, Gordonibacter pamelaee, Helicobacter pylori, Gordonibacter pamelaee, Holdemania filiformis, Gordonibacter pamelaee, Kingella oralis, Gordonibacter pamelaee, Klebsiella pneumoniae, Gordonibacter pamelaee, Klebsiella varicola, Gordonibacter pamelaee, Lachnospiraceae bacterium 5_1_57FAA, Gordonibacter pamelaee, Lactobacillus acidophilus, Gordonibacter pamelaee, Lactobacillus amylovorus, Gordonibacter pamelaee, Lactobacillus brevis, Gordonibacter pamelaee, Lactobacillus casei, Gordonibacter pamelaee, Lactobacillus crispatus, Gordonibacter pamelaee, Lactobacillus delbrueckii, Gordonibacter pamelaee, Lactobacillus fermentum, Gordonibacter pamelaee, Lactobacillus gasseri, Gordonibacter pamelaee, Lactobacillus iners, Gordonibacter pamelaee, Lactobacillus jensenii, Gordonibacter pamelaee, Lactobacillus johnsonii, Gordonibacter pamelaee, Lactobacillus paracasei, Gordonibacter pamelaee, Lactobacillus plantarum, Gordonibacter pamelaee, Lactobacillus reuteri, Gordonibacter pamelaee, Lactobacillus rhamnosus, Gordonibacter pamelaee, Lactobacillus ruminis, Gordonibacter pamelaee, Lactobacillus sakei, Gordonibacter pamelaee, Lactobacillus salivarius, Gordonibacter pamelaee, Lactococcus lactis, Gordonibacter pamelaee, Lautropia mirabilis, Gordonibacter pamelaee, Leuconostoc citreum, Gordonibacter pamelaee, Leuconostoc gascomitatum, Gordonibacter pamelaee, Leuconostoc mesenteroides, Gordonibacter pamelaee, Listeria monocytogenes, Gordonibacter pamelaee, Marvinbryantia formatexigens, Gordonibacter pamelaee, Megamonas hypermegale, Gordonibacter pamelaee, Megasphaera micronuciformis, Gordonibacter pamelaee, Methanobrevibacter smithii, Gordonibacter pamelaee, Methanospaera stadtmannae, Gordonibacter pamelaee, Methylobacterium radiotolerans, Gordonibacter pamelaee, Mitsuokella multacida, Gordonibacter pamelaee, Mobiluncus curtisii, Gordonibacter pamelaee, Mycoplasma hominis, Gordonibacter pamelaee, Neisseria mucosa, Gordonibacter pamelaee, Odoribacter splanchnicus, Gordonibacter pamelaee, Olsenella uli, Gordonibacter pamelaee, Oribacterium sinus, Gordonibacter pamelaee, Oxalobacter formigenes, Gordonibacter pamelaee, Parabacteroides distansoni, Gordonibacter pamelaee, Parabacteroides johnsonii, Gordonibacter pamelaee, Parabacteroides merdae, Gordonibacter pamelaee, Parvimonas micra, Gordonibacter pamelaee, Pediococcus acidilactici, Gordonibacter pamelaee, Pediococcus pentosaceus, Gordonibacter pamelaee, Peptoniphilus duerdenii, Gordonibacter pamelaee, Peptoniphilus harei, Gordonibacter pamelaee, Peptoniphilus lacrimalis, Gordonibacter pamelaee, Peptostreptococcus anaerobius, Gordonibacter pamelaee, Peptostreptococcus stomatis, Gordonibacter pamelaee, Porphyromonas asaccharolytica, Gordonibacter pamelaee, Porphyromonas uenonis, Gordonibacter pamelaee, Prevotella amnii, Gordonibacter pamelaee, Prevotella bergensis, Gordonibacter pamelaee, Prevotella bivia, Gordonibacter pamelaee, Prevotella buccae, Gordonibacter pamelaee, Prevotella buccalis, Gordonibacter pamelaee, Prevotella copri, Gordonibacter pamelaee, Prevotella disiens, Gordonibacter pamelaee, Prevotella melaninogenica, Gordonibacter pamelaee, Prevotella multiformis, Gordonibacter pamelaee, Prevotella oralis, Gordonibacter pamelaee, Prevotella oris, Gordonibacter pamelaee, Prevotella salivae, Gordonibacter pamelaee, Prevotella timonensis, Gordonibacter pamelaee, Propionibacterium acnes, Gordonibacter pamelaee, Propionibacterium freudenreichii, Gordonibacter pamelaee, Proteus mirabilis, Gordonibacter pamelaee, Proteus penneri, Gordonibacter pamelaee, Pseudoflavonifractor capillosus, Gordonibacter pamelaee, Pseudomonas aeruginosa, Gordonibacter pamelaee, Pseudomonas fluorescens, Gordonibacter pamelaee, Pseudomonas putida, Gordonibacter pamelaee, Pseudoramibacter alactolyticus, Gordonibacter pamelaee, Pyramidobacter piscolens, Gordonibacter pamelaee, Rhodospseudomonas palustris, Gordonibacter pamelaee, Roseburia intestinalis, Gordonibacter pamelaee, Roseburia inulinivorans, Gordonibacter pamelaee, Rothia dentocariosa, Gordonibacter pamelaee, Rothia mucilaginosa, Gordonibacter pamelaee, Ruminococcus albus, Gordonibacter pamelaee, Ruminococcus bromii, Gordonibacter pamelaee, Ruminococcus gnavus, Gordonibacter pamelaee, Ruminococcus lactaris, Gordonibacter pamelaee, Ruminococcus obeum, Gordonibacter pamelaee, Ruminococcus torques, Gordonibacter pamelaee, Selenomonas putigena, Gordonibacter pamelaee, Shigella boydii, Gordonibacter pamelaee, Shigella dysenteriae, Gordonibacter pamelaee, Shigella sonnei, Gordonibacter pamelaee, Slackia exigua, Gordonibacter pamelaee, Solobacterium moorei, Gordonibacter pamelaee, Staphylococcus aureus, Gordonibacter pamelaee, Staphylococcus epidermidis, Gordonibacter pamelaee, Staphylococcus hominis, Gordonibacter pamelaee, Staphylococcus saprophyticus, Gordonibacter pamelaee, Streptococcus warneri, Gordonibacter pamelaee, Streptococcus agalactiae, Gordonibacter pamelaee, Streptococcus anginosus, Gordonibacter pamelaee, Streptococcus australis, Gordonibacter pamelaee, Streptococcus bovis, Gordonibacter pamelaee, Streptococcus cristatus, Gordonibacter pamelaee, Streptococcus dysgalactiae, Gordonibacter pamelaee, Streptococcus equinus, Gordonibacter pamelaee, Streptococcus gordonii, Gordonibacter pamelaee, Streptococcus infantarius, Gordonibacter pamelaee, Streptococcus infantis, Gordonibacter pamelaee, Streptococcus mitis, Gordonibacter pamelaee, Streptococcus mutans, Gordonibacter pamelaee, Streptococcus oralis, Gordonibacter pamelaee, Streptococcus parasanguinis, Gordonibacter pamelaee, Streptococcus peroris, Gordonibacter pamelaee, Streptococcus pneumoniae, Gordonibacter pamelaee, Streptococcus salivarius, Gordonibacter pamelaee, Streptococcus sanguinis, Gordonibacter pamelaee, Streptococcus thermophilus, Gordonibacter pamelaee, Streptococcus vestibularis, Gordonibacter pamelaee, Subdoligranulum variabile, Gordonibacter pamelaee, Succinatimonas hippei, Gordonibacter pamelaee, Sutterella

166

167

salivarius|Holdmania filiformis|Lactococcus lactis|Holdmania filiformis|Lautropia mirabilis|Holdmania filiformis|Leuconostoc citreum|Holdmania filiformis|Leuconostoc gasicomitatum|Holdmania filiformis|Leuconostoc mesenteroides|Holdmania filiformis|Listeria monocytogenes|Holdmania filiformis|Marvinbryantia formatexigenis|Holdmania filiformis|Meganomas hypermegale|Holdmania filiformis|Megasphaera micronuciformis|Holdmania filiformis|Methanobrevibacter smithii|Holdmania filiformis|Methanospaera stadmanae|Holdmania filiformis|Methylobacterium radiotolerans|Holdmania filiformis|Mitsuokella multacida|Holdmania filiformis|Mobiluncus curtisii|Holdmania filiformis|Mycoplasma hominis|Holdmania filiformis|Neisseria mucosa|Holdmania filiformis|Odoribacter splanchnicus|Holdmania filiformis|Olsenella uli|Holdmania filiformis|Oribacterium sinus|Holdmania filiformis|Oxalobacter formigenes|Holdmania filiformis|Parabacteroides distasonis|Holdmania filiformis|Parabacteroides johnsonii|Holdmania filiformis|Parabacteroides merdae|Holdmania filiformis|Parvimonas micra|Holdmania filiformis|Pediococcus acidilactici|Holdmania filiformis|Pediococcus pentosaceus|Holdmania filiformis|Peptoniphilus duerdenii|Holdmania filiformis|Peptoniphilus harei|Holdmania filiformis|Peptoniphilus lacrimalis|Holdmania filiformis|Peptostreptococcus anaerobius|Holdmania filiformis|Peptostreptococcus stomatis|Holdmania filiformis|Porphyromonas asaccharolytica|Holdmania filiformis|Porphyromonas uenonis|Holdmania filiformis|Prevotella amnii|Holdmania filiformis|Prevotella bergensis|Holdmania filiformis|Prevotella bivia|Holdmania filiformis|Prevotella buccae|Holdmania filiformis|Prevotella buccalis|Holdmania filiformis|Prevotella copri|Holdmania filiformis|Prevotella disiens|Holdmania filiformis|Prevotella melaninogenica|Holdmania filiformis|Prevotella multiformis|Holdmania filiformis|Prevotella oris|Holdmania filiformis|Prevotella salivae|Holdmania filiformis|Prevotella timonensis|Holdmania filiformis|Propionibacterium acnes|Holdmania filiformis|Propionibacterium freudenreichii|Holdmania filiformis|Proteus mirabilis|Holdmania filiformis|Proteus penneri|Holdmania filiformis|Pseudoflavonifractor capillosus|Holdmania filiformis|Pseudomonas aeruginosa|Holdmania filiformis|Pseudomonas fluorescens|Holdmania filiformis|Pseudomonas putida|Holdmania filiformis|Pseudoramibacter alactolyticus|Holdmania filiformis|Pyramidobacter piscicola|Holdmania filiformis|Rhodopseudomonas palustris|Holdmania filiformis|Roseburia intestinalis|Holdmania filiformis|Roseburia inulinivorans|Holdmania filiformis|Roseburia dentocariosa|Holdmania filiformis|Rodia mucilaginosa|Holdmania filiformis|Ruminococcus albus|Holdmania filiformis|Ruminococcus bromii|Holdmania filiformis|Ruminococcus gnavus|Holdmania filiformis|Ruminococcus lactaris|Holdmania filiformis|Ruminococcus obeum|Holdmania filiformis|Ruminococcus torques|Holdmania filiformis|Selenomonas spjutigena|Holdmania filiformis|Shigella boydii|Holdmania filiformis|Shigella dysenteriae|Holdmania filiformis|Shigella sonnei|Holdmania filiformis|Slackia exigua|Holdmania filiformis|Solobacterium moorei|Holdmania filiformis|Staphylococcus aureus|Holdmania filiformis|Staphylococcus epidermidis|Holdmania filiformis|Staphylococcus hominis|Holdmania filiformis|Staphylococcus saprophyticus|Holdmania filiformis|Staphylococcus warneri|Holdmania filiformis|Streptococcus agalactiae|Holdmania filiformis|Streptococcus anginosus|Holdmania filiformis|Streptococcus australis|Holdmania filiformis|Streptococcus bovis|Holdmania filiformis|Streptococcus cristatus|Holdmania filiformis|Streptococcus dysgalactiae|Holdmania filiformis|Streptococcus equinus|Holdmania filiformis|Streptococcus gordonii|Holdmania filiformis|Streptococcus infantarius|Holdmania filiformis|Streptococcus infantis|Holdmania filiformis|Streptococcus mitis|Holdmania filiformis|Streptococcus mutans|Holdmania filiformis|Streptococcus pneumoniae|Holdmania filiformis|Streptococcus peroris|Holdmania filiformis|Streptococcus pneumoniae|Holdmania filiformis|Streptococcus salivarius|Holdmania filiformis|Streptococcus sanguinis|Holdmania filiformis|Streptococcus thermophilus|Holdmania filiformis|Streptococcus vestibularis|Holdmania filiformis|Subdoligranulum variable|Holdmania filiformis|Succinatimonas hippei|Holdmania filiformis|Sutterella wadsworthensis|Holdmania filiformis|Tropheryma whippelii|Holdmania filiformis|Veillonella atypica|Holdmania filiformis|Veillonella dispar|Holdmania filiformis|Veillonella parvula|Holdmania filiformis|Victivallis vadensis|Kingella oralis|Kingella oralis|Klebsiella pneumoniae|Kingella oralis|Klebsiella varicola|Kingella oralis|Lachnospiraceae bacterium 5_1_57FAA|Kingella oralis|Lactobacillus acidophilus|Kingella oralis|Lactobacillus amylovorus|Kingella oralis|Lactobacillus brevis|Kingella oralis|Lactobacillus casei|Kingella oralis|Lactobacillus crispatus|Kingella oralis|Lactobacillus delbrueckii|Kingella oralis|Lactobacillus fermentum|Kingella oralis|Lactobacillus gasseri|Kingella oralis|Lactobacillus jensenii|Kingella oralis|Lactobacillus johnsonii|Kingella oralis|Lactobacillus paracasei|Kingella oralis|Lactobacillus plantarum|Kingella oralis|Lactobacillus reuteri|Kingella oralis|Lactobacillus rhamnosus|Kingella oralis|Lactobacillus sakei|Kingella oralis|Lactobacillus salivarius|Kingella oralis|Lactococcus lactis|Kingella oralis|Lautropia mirabilis|Kingella oralis|Leuconostoc citreum|Kingella oralis|Leuconostoc gasicomitatum|Kingella oralis|Leuconostoc mesenteroides|Kingella oralis|Listeria monocytogenes|Kingella oralis|Marvinbryantia formatexigenis|Kingella oralis|Meganomas hypermegale|Kingella oralis|Mitsuokella multacida|Kingella oralis|Mobiluncus curtisii|Kingella oralis|Mycoplasma hominis|Kingella oralis|Neisseria mucosa|Kingella oralis|Odoribacter splanchnicus|Kingella oralis|Olsenella uli|Kingella oralis|Oribacterium sinus|Kingella oralis|Oxalobacter formigenes|Kingella oralis|Parabacteroides distasonis|Kingella oralis|Parabacteroides merdae|Kingella oralis|Parvimonas micra|Kingella oralis|Pediococcus acidilactici|Kingella oralis|Pediococcus pentosaceus|Kingella oralis|Peptoniphilus harei|Kingella oralis|Peptoniphilus lacrimalis|Kingella oralis|Peptostreptococcus anaerobius|Kingella oralis|Peptostreptococcus stomatis|Kingella oralis|Porphyromonas asaccharolytica|Kingella oralis|Porphyromonas uenonis|Kingella oralis|Prevotella amnii|Kingella oralis|Prevotella bergensis|Kingella oralis|Prevotella bivia|Kingella oralis|Prevotella buccae|Kingella oralis|Prevotella buccalis|Kingella oralis|Prevotella copri|Kingella oralis|Prevotella disiens|Kingella oralis|Prevotella melaninogenica|Kingella oralis|Prevotella multiformis|Kingella oralis|Prevotella oris|Kingella oralis|Prevotella salivae|Kingella oralis|Prevotella timonensis|Kingella oralis|Propionibacterium acnes|Kingella oralis|Propionibacterium freudenreichii|Kingella oralis|Proteus mirabilis|Kingella oralis|Proteus penneri|Kingella oralis|Pseudoflavonifractor capillosus|Kingella oralis|Pseudomonas aeruginosa|Kingella oralis|Pseudomonas fluorescens|Kingella oralis|Pseudomonas putida|Kingella oralis|Pseudoramibacter alactolyticus|Kingella oralis|Pyramidobacter piscicola|Kingella oralis|Rhodopseudomonas palustris|Kingella oralis|Roseburia intestinalis|Kingella oralis|Roseburia inulinivorans|Kingella oralis|Rodia dentocariosa|Kingella oralis|Rodia mucilaginosa|Kingella oralis|Ruminococcus albus|Kingella oralis|Ruminococcus bromii|Kingella oralis|Ruminococcus gnavus|Kingella oralis|Ruminococcus lactaris|Kingella oralis|Ruminococcus obeum|Kingella oralis|Ruminococcus torques|Kingella oralis|Selenomonas spjutigena|Kingella oralis|Shigella boydii|Kingella oralis|Shigella dysenteriae|Kingella oralis|Shigella sonnei|Kingella oralis|Slackia exigua|Kingella oralis|Solobacterium moorei|Kingella oralis|Staphylococcus aureus|Kingella oralis|Staphylococcus epidermidis|Kingella oralis|Staphylococcus hominis|Kingella oralis|Staphylococcus saprophyticus|Kingella oralis|Staphylococcus warneri|Kingella oralis|Streptococcus agalactiae|Kingella oralis|Streptococcus anginosus|Kingella oralis|Streptococcus australis|Kingella oralis|Streptococcus bovis|Kingella oralis|Streptococcus cristatus|Kingella oralis|Streptococcus dysgalactiae|Kingella oralis|Streptococcus equinus|Kingella oralis|Streptococcus gordonii|Kingella oralis|Streptococcus infantarius|Kingella oralis|Streptococcus infantis|Kingella oralis|Streptococcus mitis|Kingella oralis|Streptococcus mutans|Kingella oralis|Streptococcus pneumoniae|Kingella oralis|Streptococcus peroris|Kingella oralis|Streptococcus pneumoniae|Kingella oralis|Streptococcus salivarius|Kingella oralis|Streptococcus sanguinis|Kingella oralis|Streptococcus thermophilus|Kingella oralis|Streptococcus vestibularis|Kingella oralis|Subdoligranulum variable|Kingella oralis|Succinatimonas hippei|Kingella oralis|Sutterella wadsworthensis|Kingella oralis|Tropheryma whippelii|Kingella oralis|Veillonella atypica|Kingella oralis|Veillonella dispar|Kingella oralis|Veillonella parvula|Kingella oralis|Victivallis vadensis|Klebsiella pneumoniae|Klebsiella pneumoniae|Klebsiella varicola|Klebsiella pneumoniae|Lachnospiraceae bacterium 5_1_57FAA|Klebsiella pneumoniae|Lactobacillus acidophilus|Klebsiella pneumoniae|Lactobacillus amylovorus|Klebsiella pneumoniae|Lactobacillus brevis|Klebsiella pneumoniae|Lactobacillus casei|Klebsiella pneumoniae|Lactobacillus crispatus|Klebsiella pneumoniae|Lactobacillus delbrueckii|Klebsiella pneumoniae|Lactobacillus fermentum|Klebsiella pneumoniae|Lactobacillus gasseri|Klebsiella pneumoniae|Lactobacillus jensenii|Klebsiella pneumoniae|Lactobacillus johnsonii|Klebsiella pneumoniae|Lactobacillus paracasei|Klebsiella pneumoniae|Lactobacillus plantarum|Klebsiella pneumoniae|Lactobacillus reuteri|Klebsiella pneumoniae|Lactobacillus rhamnosus|Klebsiella pneumoniae|Lactobacillus salivarius|Klebsiella pneumoniae|Lactobacillus sakei|Klebsiella pneumoniae|Lactococcus lactis|Klebsiella pneumoniae|Lautropia mirabilis|Klebsiella pneumoniae|Leuconostoc citreum|Klebsiella pneumoniae|Leuconostoc gasicomitatum|Klebsiella pneumoniae|Leuconostoc mesenteroides|Klebsiella pneumoniae|Listeria monocytogenes|Klebsiella pneumoniae|Marvinbryantia formatexigenis|Klebsiella pneumoniae|Meganomas hypermegale|Klebsiella pneumoniae|Megasphaera micronuciformis|Klebsiella pneumoniae|Methanobrevibacter smithii|Klebsiella pneumoniae|Methanospaera stadmanae|Klebsiella pneumoniae|Methylobacterium radiotolerans|Klebsiella pneumoniae|Mitsuokella multacida|Klebsiella pneumoniae|Mobiluncus curtisii|Klebsiella pneumoniae|Mycoplasma hominis|Klebsiella pneumoniae|Neisseria mucosa|Klebsiella pneumoniae|Odoribacter splanchnicus|Klebsiella pneumoniae|Olsenella uli|Klebsiella pneumoniae|Oribacterium sinus|Klebsiella pneumoniae|Oxalobacter formigenes|Klebsiella pneumoniae|Parabacteroides distasonis|Klebsiella pneumoniae|Parabacteroides merdae|Klebsiella pneumoniae|Parvimonas micra|Klebsiella pneumoniae|Pediococcus acidilactici|Klebsiella pneumoniae|Pediococcus pentosaceus|Klebsiella pneumoniae|Peptoniphilus harei|Klebsiella pneumoniae|Peptoniphilus lacrimalis|Klebsiella pneumoniae|Peptostreptococcus anaerobius|Klebsiella pneumoniae|Peptostreptococcus stomatis|Klebsiella pneumoniae|Porphyromonas asaccharolytica|Klebsiella pneumoniae|Porphyromonas uenonis|Klebsiella pneumoniae|Prevotella amnii|Klebsiella pneumoniae|Prevotella bergensis|Klebsiella pneumoniae|Prevotella bivia|Klebsiella pneumoniae|Prevotella buccae|Klebsiella pneumoniae|Prevotella buccalis|Klebsiella pneumoniae|Prevotella copri|Klebsiella pneumoniae|Prevotella disiens|Klebsiella pneumoniae|Prevotella melaninogenica|Klebsiella pneumoniae|Prevotella multiformis|Klebsiella pneumoniae|Prevotella oris|Klebsiella pneumoniae|Prevotella salivae|Klebsiella pneumoniae|Prevotella timonensis|Klebsiella pneumoniae|Propionibacterium acnes|Klebsiella pneumoniae|Propionibacterium freudenreichii|Klebsiella pneumoniae|Proteus mirabilis|Klebsiella pneumoniae|Proteus penneri|Klebsiella pneumoniae|Pseudoflavonifractor capillosus|Klebsiella pneumoniae|Pseudomonas aeruginosa|Klebsiella pneumoniae|Pseudomonas fluorescens|Klebsiella pneumoniae|Pseudomonas putida|Klebsiella pneumoniae|Pseudoramibacter alactolyticus|Klebsiella pneumoniae|Pyramidobacter piscicola|Klebsiella pneumoniae|Rhodopseudomonas palustris|Klebsiella pneumoniae|Roseburia intestinalis|Klebsiella pneumoniae|Roseburia inulinivorans|Klebsiella pneumoniae|Rodia dentocariosa|Klebsiella pneumoniae|Rodia mucilaginosa|Klebsiella pneumoniae|Ruminococcus albus|Klebsiella pneumoniae|Ruminococcus bromii|Klebsiella pneumoniae|Ruminococcus gnavus|Klebsiella pneumoniae|Ruminococcus lactaris|Klebsiella pneumoniae|Ruminococcus obeum|Klebsiella pneumoniae|Ruminococcus torques|Klebsiella pneumoniae|Selenomonas spjutigena|Klebsiella pneumoniae|Shigella boydii|Klebsiella pneumoniae|Shigella dysenteriae|Klebsiella pneumoniae|Shigella sonnei|Klebsiella pneumoniae|Slackia exigua|Klebsiella pneumoniae|Solobacterium moorei|Klebsiella pneumoniae|Staphylococcus aureus|Klebsiella pneumoniae|Staphylococcus epidermidis|Klebsiella pneumoniae|Staphylococcus hominis|Klebsiella pneumoniae|Staphylococcus saprophyticus|Klebsiella pneumoniae|Staphylococcus warneri|Klebsiella pneumoniae|Streptococcus agalactiae|Klebsiella pneumoniae|Streptococcus anginosus|Klebsiella pneumoniae|Streptococcus australis|Klebsiella pneumoniae|Streptococcus bovis|Klebsiella pneumoniae|Streptococcus cristatus|Klebsiella pneumoniae|Streptococcus dysgalactiae|Klebsiella pneumoniae|Streptococcus equinus|Klebsiella pneumoniae|Streptococcus gordonii|Klebsiella pneumoniae|Streptococcus infantarius|Klebsiella pneumoniae|Streptococcus infantis|Klebsiella pneumoniae|Streptococcus mitis|Klebsiella pneumoniae|Streptococcus mutans|Klebsiella pneumoniae|Streptococcus pneumoniae|Streptococcus peroris|Klebsiella pneumoniae|Streptococcus pneumoniae|Streptococcus salivarius|Klebsiella pneumoniae|Streptococcus sanguinis|Klebsiella pneumoniae|Streptococcus thermophilus|Klebsiella pneumoniae|Streptococcus vestibularis|Klebsiella pneumoniae|Subdoligranulum variable|Klebsiella pneumoniae|Succinatimonas hippei|Klebsiella pneumoniae|Sutterella wadsworthensis|Klebsiella pneumoniae|Tropheryma whippelii|Klebsiella pneumoniae|Veillonella atypica|Klebsiella pneumoniae|Veillonella dispar|Klebsiella pneumoniae|Veillonella parvula|Klebsiella pneumoniae|Victivallis vadensis|Klebsiella varicola|Klebsiella varicola|Klebsiella varicola|Lachnospiraceae bacterium 5_1_57FAA|Klebsiella varicola|Lactobacillus acidophilus|Klebsiella varicola|Lactobacillus amylovorus|Klebsiella varicola|Lactobacillus brevis|Klebsiella varicola|Lactobacillus casei|Klebsiella varicola|Lactobacillus crispatus|Klebsiella varicola|Lactobacillus delbrueckii|Klebsiella varicola|Lactobacillus fermentum|Klebsiella varicola|Lactobacillus gasseri|Klebsiella varicola|Lactobacillus iners|Klebsiella varicola|Lactobacillus jensenii|Klebsiella varicola|Lactobacillus johnsonii|Klebsiella varicola|Lactobacillus paracasei|Klebsiella varicola|Lactobacillus plantarum|Klebsiella varicola|Lactobacillus reuteri|Klebsiella varicola|Lactobacillus rhamnosus|Klebsiella varicola|Lactobacillus sakei|Klebsiella varicola|Lactobacillus salivarius|Klebsiella varicola|Lactococcus lactis|Klebsiella varicola|Lautropia mirabilis|Klebsiella varicola|Leuconostoc citreum|Klebsiella varicola|Leuconostoc gasicomitatum|Klebsiella varicola|Leuconostoc mesenteroides|Klebsiella varicola|Listeria monocytogenes|Klebsiella varicola|Marvinbryantia formatexigenis|Klebsiella varicola|Meganomas hypermegale|Klebsiella varicola|Megasphaera micronuciformis|Klebsiella varicola|Methanobrevibacter smithii|Klebsiella varicola|Methanospaera stadmanae|Klebsiella varicola|Methylobacterium radiotolerans|Klebsiella varicola|Mitsuokella multacida|Klebsiella varicola|Mobiluncus curtisii|Klebsiella varicola|Mycoplasma hominis|Klebsiella varicola|Neisseria mucosa|Klebsiella varicola|Odoribacter splanchnicus|Klebsiella varicola|Olsenella uli|Klebsiella varicola|Oribacterium sinus|Klebsiella varicola|Oxalobacter formigenes|Klebsiella varicola|Parabacteroides distasonis|Klebsiella varicola|Parabacteroides merdae|Klebsiella varicola|Parvimonas micra|Klebsiella varicola|Pediococcus acidilactici|Klebsiella varicola|Pediococcus pentosaceus|Klebsiella varicola|Peptoniphilus harei|Klebsiella varicola|Peptoniphilus lacrimalis|Klebsiella varicola|Peptostreptococcus anaerobius|Klebsiella varicola|Peptostreptococcus stomatis|Klebsiella varicola|Porphyromonas asaccharolytica|Klebsiella varicola|Porphyromonas uenonis|Klebsiella varicola|Prevotella amnii|Klebsiella varicola|Prevotella bergensis|Klebsiella varicola|Prevotella bivia|Klebsiella varicola|Prevotella buccae|Klebsiella varicola|Prevotella buccalis|Klebsiella varicola|Prevotella copri|Klebsiella varicola|Prevotella disiens|Klebsiella varicola|Prevotella melaninogenica|Klebsiella varicola|Prevotella multiformis|Klebsiella varicola|Prevotella oris|Klebsiella varicola|Prevotella salivae|Klebsiella varicola|Prevotella timonensis|Klebsiella varicola|Propionibacterium acnes|Klebsiella varicola|Propionibacterium freudenreichii|Klebsiella varicola|Proteus mirabilis|Klebsiella varicola|Proteus penneri|Klebsiella varicola|Pseudoflavonifractor capillosus|Klebsiella varicola|Pseudomonas aeruginosa|Klebsiella varicola|Pseudomonas fluorescens|Klebsiella varicola|Pseudomonas putida|Klebsiella varicola|Pseudoramibacter alactolyticus|Klebsiella varicola|Pyramidobacter piscicola|Klebsiella varicola|Rhodopseudomonas palustris|Klebsiella varicola|Roseburia intestinalis|Klebsiella varicola|Roseburia inulinivorans|Klebsiella varicola|Rodia dentocariosa|Klebsiella varicola|Rodia mucilaginosa|Klebsiella varicola|Ruminococcus albus|Klebsiella varicola|Ruminococcus bromii|Klebsiella varicola|Ruminococcus gnavus|Klebsiella varicola|Ruminococcus lactaris|Klebsiella

169

170

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

atypica|Veillonella atypica,Veillonella dispar|Veillonella atypica,Veillonella parvula|Veillonella atypica,Victivallis vadensis|Veillonella dispar,Veillonella dispar|Veillonella dispar,Veillonella
parvula|Veillonella dispar,Victivallis vadensis|Veillonella parvula,Veillonella parvula|Veillonella parvula,Victivallis vadensis|Victivallis vadensis,Victivallis vadensis

TABLE 5

SPC1	SPC2	OTU1	OTU2	Result
SPC10414	SPC10414	Alistipes_shahii	Alistipes_shahii	
SPC10211	SPC10414	Bacteroides_caccae	Alistipes_shahii	--
SPC10213	SPC10414	Bacteroides_eggerthii	Alistipes_shahii	+++
SPC10030	SPC10414	Bacteroides_ovatus	Alistipes_shahii	+
SPC00006	SPC10414	Bacteroides_sp_1_1_6	Alistipes_shahii	--
SPC00007	SPC10414	Bacteroides_sp_3_1_23	Alistipes_shahii	+++
SPC10019	SPC10414	Bacteroides_sp_D20	Alistipes_shahii	+
SPC00005	SPC10414	Bacteroides_vulgatus	Alistipes_shahii	+++
SPC10081	SPC10414	Bacteroides_vulgatus	Alistipes_shahii	+
SPC10301	SPC10414	Bifidobacterium_adolescentis	Alistipes_shahii	+++
SPC10298	SPC10414	Bifidobacterium_pseudocatenulatum	Alistipes_shahii	+++
SPC00021	SPC10414	Blaustia_producta	Alistipes_shahii	+++
SPC10403	SPC10414	Blaustia_schrikkii	Alistipes_shahii	
SPC10243	SPC10414	Clostridium_hattewayi	Alistipes_shahii	
SPC10026	SPC10414	Clostridium_nexile	Alistipes_shahii	+++
SPC00027	SPC10414	Clostridium_sp_HGF2	Alistipes_shahii	
SPC10355	SPC10414	Clostridium_symbiosum	Alistipes_shahii	
SPC10097	SPC10414	Collinsella_aerofaciens	Alistipes_shahii	+++
SPC00009	SPC10414	Coriobacterium_sp_D7	Alistipes_shahii	+++
SPC10080	SPC10414	Corynebacterium_cattis	Alistipes_shahii	-
SPC10304	SPC10414	Coproccoccus_comes	Alistipes_shahii	
SPC00018	SPC10414	Dorea_fornicigeniens	Alistipes_shahii	---
SPC00057	SPC10414	Dorea_longicatena	Alistipes_shahii	+++
SPC00008	SPC10414	Enterococcus_faecalis	Alistipes_shahii	+++
SPC10001	SPC10414	Enterobacteriaceae_bacterium	Alistipes_shahii	---
SPC10061	SPC10414	Escherichia_coli	Alistipes_shahii	+++
SPC10110	SPC10414	Escherichia_coli	Alistipes_shahii	---
SPC00022	SPC10414	Eubacterium_elgens	Alistipes_shahii	+++
SPC10363	SPC10414	Eubacterium_rectale	Alistipes_shahii	--
SPC00054	SPC10414	Faecalibacterium_prausnitzii	Alistipes_shahii	+
SPC10386	SPC10414	Faecalibacterium_prausnitzii	Alistipes_shahii	
SPC10390	SPC10414	Lachnospiraceae_bacterium_5_1_57AA	Alistipes_shahii	
SPC00056	SPC10414	Odoribacter_splanchincus	Alistipes_shahii	
SPC10388	SPC10414	Odoribacter_splanchincus	Alistipes_shahii	
SPC10048	SPC10414	Parabacteroides_merdae	Alistipes_shahii	
SPC00061	SPC10414	Roseburia_intestinalis	Alistipes_shahii	-
SPC10197	SPC10414	Ruminococcus_obeum	Alistipes_shahii	
SPC10233	SPC10414	Ruminococcus_torques	Alistipes_shahii	
SPC00015	SPC10414	Streptococcus_thermophilus	Alistipes_shahii	+++
SPC10211	SPC10211	Bacteroides_caccae	Bacteroides_caccae	+++
SPC10030	SPC10211	Bacteroides_ovatus	Bacteroides_caccae	+++
SPC00006	SPC10211	Bacteroides_sp_1_1_6	Bacteroides_caccae	+++
SPC00007	SPC10211	Bacteroides_sp_3_1_23	Bacteroides_caccae	+++
SPC10019	SPC10211	Bacteroides_sp_D20	Bacteroides_caccae	+++
SPC00005	SPC10211	Bacteroides_vulgatus	Bacteroides_caccae	+++
SPC10081	SPC10211	Bacteroides_vulgatus	Bacteroides_caccae	+
SPC00021	SPC10211	Blaustia_producta	Bacteroides_caccae	+++
SPC00026	SPC10211	Clostridium_nexile	Bacteroides_caccae	
SPC00027	SPC10211	Clostridium_sp_HGF2	Bacteroides_caccae	+++
SPC10087	SPC10211	Collinsella_aerofaciens	Bacteroides_caccae	

TABLE 5

SPC00009	SPC10211	Coprobacillus_sp_D7	Bacteroides_caccae	+++
SPC00080	SPC10211	Coproccoccus_cattus	Bacteroides_caccae	+++
SPC00018	SPC10211	Dorea_formicigenans	Bacteroides_caccae	+++
SPC00057	SPC10211	Dorea_longicatena	Bacteroides_caccae	+++
SPC00008	SPC10211	Enterococcus_faecalis	Bacteroides_caccae	++
SPC10001	SPC10211	Erysipelotrichaceae_bacterium	Bacteroides_caccae	+++
SPC00001	SPC10211	Escherichia_coli	Bacteroides_caccae	+++
SPC10110	SPC10211	Escherichia_coli	Bacteroides_caccae	++
SPC00022	SPC10211	Subbacterium_eigens	Bacteroides_caccae	-
SPC00054	SPC10211	Faecalibacterium_prausnitzii	Bacteroides_caccae	+
SPC00056	SPC10211	Odoribacter_splanchnicus	Bacteroides_caccae	+++
SPC10048	SPC10211	Parabacteroides_merdae	Bacteroides_caccae	++
SPC00061	SPC10211	Roseburia_intestinalis	Bacteroides_caccae	+++
SPC10197	SPC10211	Ruminococcus_obaeum	Bacteroides_caccae	++
SPC00015	SPC10211	Streptococcus_thermophilus	Bacteroides_caccae	+++
SPC10211	SPC10213	Bacteroides_caccae	Bacteroides_eggerthii	+++
SPC10213	SPC10213	Bacteroides_eggerthii	Bacteroides_eggerthii	++
SPC10030	SPC10213	Bacteroides_ovatus	Bacteroides_eggerthii	+++
SPC00006	SPC10213	Bacteroides_sp_1_1_6	Bacteroides_eggerthii	++
SPC00007	SPC10213	Bacteroides_sp_3_1_23	Bacteroides_eggerthii	+++
SPC10019	SPC10213	Bacteroides_sp_D20	Bacteroides_eggerthii	++
SPC00005	SPC10213	Bacteroides_vulgatus	Bacteroides_eggerthii	+++
SPC10081	SPC10213	Bacteroides_vulgatus	Bacteroides_eggerthii	+++
SPC00021	SPC10213	Blautia_producta	Bacteroides_eggerthii	++
SPC00026	SPC10213	Clotridium_nexile	Bacteroides_eggerthii	+++
SPC00027	SPC10213	Clotridium_sp_Hor2	Bacteroides_eggerthii	-
SPC10097	SPC10213	Collinsella_aerofaciens	Bacteroides_eggerthii	+++
SPC00009	SPC10213	Coprobacillus_sp_D7	Bacteroides_eggerthii	+
SPC00080	SPC10213	Coproccoccus_cattus	Bacteroides_eggerthii	+
SPC10018	SPC10213	Dorea_formicigenans	Bacteroides_eggerthii	-
SPC00057	SPC10213	Dorea_longicatena	Bacteroides_eggerthii	+++
SPC00008	SPC10213	Enterococcus_faecalis	Bacteroides_eggerthii	++
SPC10001	SPC10213	Erysipelotrichaceae_bacterium	Bacteroides_eggerthii	+++
SPC00001	SPC10213	Escherichia_coli	Bacteroides_eggerthii	+++
SPC10110	SPC10213	Escherichia_coli	Bacteroides_eggerthii	+++
SPC00022	SPC10213	Subbacterium_eigens	Bacteroides_eggerthii	+++
SPC00054	SPC10213	Faecalibacterium_prausnitzii	Bacteroides_eggerthii	+++
SPC00056	SPC10213	Odoribacter_splanchnicus	Bacteroides_eggerthii	+++
SPC10048	SPC10213	Parabacteroides_merdae	Bacteroides_eggerthii	+++
SPC00061	SPC10213	Roseburia_intestinalis	Bacteroides_eggerthii	+++
SPC10197	SPC10213	Ruminococcus_obaeum	Bacteroides_eggerthii	+++
SPC00015	SPC10213	Streptococcus_thermophilus	Bacteroides_eggerthii	+++
SPC10030	SPC10030	Bacteroides_ovatus	Bacteroides_ovatus	+++
SPC00006	SPC10030	Bacteroides_sp_1_1_6	Bacteroides_ovatus	+++
SPC00007	SPC10030	Bacteroides_sp_3_1_23	Bacteroides_ovatus	+++
SPC10019	SPC10030	Bacteroides_sp_D20	Bacteroides_ovatus	-
SPC00005	SPC10030	Bacteroides_vulgatus	Bacteroides_ovatus	+
SPC10081	SPC10030	Blautia_producta	Bacteroides_ovatus	+++
SPC00021	SPC10030	Clotridium_nexile	Bacteroides_ovatus	+++
SPC00026	SPC10030	Clotridium_sp_HGF2	Bacteroides_ovatus	+++
SPC00009	SPC10030	Coprobacillus_sp_D7	Bacteroides_ovatus	+++
SPC00080	SPC10030	Coproccoccus_cattus	Bacteroides_ovatus	+++
SPC00018	SPC10030	Dorea_formicigenans	Bacteroides_ovatus	-
SPC00057	SPC10030	Dorea_longicatena	Bacteroides_ovatus	+++

TABLE 5

SPC00008	SPC10030	Enterococcus faecalis	Bacteroides ovatus	+++
SPC10001	SPC10030	Erysipelothricaceae_bacterium	Bacteroides ovatus	+++
SPC00001	SPC10030	Escherichia coli	Bacteroides ovatus	-
SPC00022	SPC10030	Eubacterium eligens	Bacteroides ovatus	
SPC00054	SPC10030	Faecalibacterium prausnitzii	Bacteroides ovatus	
SPC00056	SPC10030	Odoribacter splanchnicus	Bacteroides ovatus	
SPC00061	SPC10030	Roseburia intestinalis	Bacteroides ovatus	
SPC00015	SPC10030	Streptococcus thermophilus	Bacteroides ovatus	++
SPC00006	SPC00006	Bacteroides_sp_1_1_6	Bacteroides_sp_1_1_6	+++
SPC00005	SPC00006	Bacteroides_vulgatus	Bacteroides_sp_1_1_6	+++
SPC00001	SPC00001	Escherichia coli	Bacteroides_sp_1_1_6	+++
SPC00006	SPC00007	Bacteroides_sp_1_1_6	Bacteroides_sp_3_1_23	+++
SPC00007	SPC00007	Bacteroides_sp_3_1_23	Bacteroides_sp_3_1_23	+++
SPC00001	SPC00007	Escherichia coli	Bacteroides_sp_3_1_23	+++
SPC00006	SPC10019	Bacteroides_sp_1_1_6	Bacteroides_sp_D20	+++
SPC00007	SPC10019	Bacteroides_sp_3_1_23	Bacteroides_sp_D20	+++
SPC10019	SPC10019	Bacteroides_vulgatus	Bacteroides_sp_D20	+
SPC00005	SPC10019	Blautia producta	Bacteroides_sp_D20	+++
SPC00021	SPC10019	Clostridium_nesle	Bacteroides_sp_D20	-
SPC00026	SPC10019	Clostridium_sp_HGF2	Bacteroides_sp_D20	
SPC00027	SPC10019	Coprocalillus_sp_D7	Bacteroides_sp_D20	
SPC00009	SPC10019	Coprococcus_catus	Bacteroides_sp_D20	
SPC00080	SPC10019	Dorea_fornicigerans	Bacteroides_sp_D20	
SPC00018	SPC10019	Dorea_longicatena	Bacteroides_sp_D20	
SPC00057	SPC10019	Enterococcus faecalis	Bacteroides_sp_D20	+++
SPC00008	SPC10019	Erysipelothricaceae_bacterium	Bacteroides_sp_D20	+++
SPC10001	SPC10019	Escherichia coli	Bacteroides_sp_D20	+++
SPC00001	SPC10019	Eubacterium eligens	Bacteroides_sp_D20	-
SPC10022	SPC10019	Faecalibacterium prausnitzii	Bacteroides_sp_D20	+
SPC00054	SPC10019	Odoribacter splanchnicus	Bacteroides_vulgatus	
SPC00056	SPC10019	Roseburia intestinalis	Bacteroides_vulgatus	
SPC00061	SPC10019	Streptococcus thermophilus	Bacteroides_vulgatus	
SPC00015	SPC10081	Bacteroides ovatus	Bacteroides_vulgatus	
SPC10030	SPC10081	Bacteroides_sp_1_1_6	Bacteroides_vulgatus	
SPC00006	SPC10081	Bacteroides_sp_3_1_23	Bacteroides_vulgatus	
SPC00007	SPC10081	Bacteroides_sp_D20	Bacteroides_vulgatus	+
SPC10019	SPC10081	Bacteroides_vulgatus	Bacteroides_vulgatus	++
SPC00005	SPC10081	Bacteroides_vulgatus	Bacteroides_vulgatus	+++
SPC10081	SPC10081	Blautia producta	Bacteroides_vulgatus	+++
SPC10021	SPC10081	Clostridium_nesle	Bacteroides_vulgatus	
SPC00026	SPC10081	Clostridium_sp_HGF2	Bacteroides_vulgatus	
SPC00027	SPC10081	Coprocalillus_sp_D7	Bacteroides_vulgatus	+++
SPC10009	SPC10081	Coprococcus_catus	Bacteroides_vulgatus	-
SPC00080	SPC10081	Dorea_fornicigerans	Bacteroides_vulgatus	++
SPC00018	SPC10081	Dorea_longicatena	Bacteroides_vulgatus	
SPC00057	SPC10081	Enterococcus faecalis	Bacteroides_vulgatus	+++
SPC00008	SPC10081	Erysipelothricaceae_bacterium	Bacteroides_vulgatus	+++
SPC10001	SPC10081	Escherichia coli	Bacteroides_vulgatus	+++
SPC00001	SPC10081	Escherichia coli	Bacteroides_vulgatus	+++
SPC00022	SPC10081	Faecalibacterium prausnitzii	Bacteroides_vulgatus	+++
SPC00054	SPC10081			

TABLE 5

SPC00056	Oderibacter_splanchicus	Bacteroides_vulgatus	+
SPC10048	Parabacteroides_merdae	Bacteroides_vulgatus	+
SPC00061	Roseburia_intestinalis	Bacteroides_vulgatus	+
SPC00015	Streptococcus_thermophilus	Bacteroides_vulgatus	---
SPC10211	Bacteroides_caccae	Bifidobacterium_adollescens	+++
SPC10213	Bacteroides_eggerthii	Bifidobacterium_adollescens	+++
SPC10301	Bacteroides_ovatus	Bifidobacterium_adollescens	+++
SPC10306	Bacteroides_sp_1_1_6	Bifidobacterium_adollescens	+++
SPC00007	Bacteroides_sp_3_1_23	Bifidobacterium_adollescens	+++
SPC10019	Bacteroides_sp_D20	Bifidobacterium_adollescens	+++
SPC00005	Bacteroides_vulgatus	Bifidobacterium_adollescens	+++
SPC10081	Bacteroides_vulgatus	Bifidobacterium_adollescens	+++
SPC10301	Bifidobacterium_adollescens	Bifidobacterium_adollescens	+++
SPC10301	Bifidobacterium_pseudocatenulatum	Bifidobacterium_adollescens	+++
SPC00021	Blautia_producta	Bifidobacterium_adollescens	+++
SPC10301	Clostridium_hattewayi	Bifidobacterium_adollescens	+++
SPC10301	Clostridium_nexile	Bifidobacterium_adollescens	+++
SPC00027	Clostridium_sp_HGF2	Bifidobacterium_adollescens	+++
SPC10301	Collinsella_aerofaciens	Bifidobacterium_adollescens	+++
SPC00009	Coprobacillus_sp_D7	Bifidobacterium_adollescens	+++
SPC10301	Coriobacterium_ratus	Bifidobacterium_adollescens	+++
SPC00080	Dorea_formicigenans	Bifidobacterium_adollescens	+++
SPC00018	Dorea_longicatena	Bifidobacterium_adollescens	+++
SPC00057	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00054	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00001	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00010	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00011	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00012	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00054	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10301	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00056	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10048	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00061	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10197	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10223	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00015	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10211	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10213	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10030	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00006	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00007	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10019	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10005	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10081	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10298	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00021	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10243	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00026	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00027	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10097	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00009	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00080	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10018	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC10057	Enterococcus_faecalis	Bifidobacterium_adollescens	+++
SPC00008	Enterococcus_faecalis	Bifidobacterium_adollescens	+++

TABLE 5

[illegible]

TABLE 5

SPC103008	SPC10415	Enterococcus faecalis	Bla _{ul} a ₁ _producta	+++
SPC10401	SPC10415	Erysipelatrichaceae_bacterium	Bla _{ul} a ₁ _producta	---
SPC03001	SPC03021	Escherichia coli	Bla _{ul} a ₁ _producta	+++
SPC03001	SPC10415	Escherichia coli	Bla _{ul} a ₁ _producta	+++
SPC10110	SPC10415	Escherichia coli	Bla _{ul} a ₁ _producta	+++
SPC03022	SPC10415	Eubacterium eligens	Bla _{ul} a ₁ _producta	+++
SPC10363	SPC10415	Eubacterium_rectale	Bla _{ul} a ₁ _producta	---
SPC03054	SPC10415	Faecalibacterium_prausnitzii	Bla _{ul} a ₁ _producta	+
SPC10366	SPC10415	Faecalibacterium_prausnitzii	Bla _{ul} a ₁ _producta	+
SPC10386	SPC10415	Faecalibacterium_prausnitzii	Bla _{ul} a ₁ _producta	+++
SPC10390	SPC10415	Lachnospiraceae_bacterium_5_1_57FAA	Bla _{ul} a ₁ _producta	+
SPC10390	SPC10415	Lachnospiraceae_bacterium_5_1_57FAA	Bla _{ul} a ₁ _producta	+++
SPC03056	SPC10415	Odoribacter_splanchincus	Bla _{ul} a ₁ _producta	-
SPC10388	SPC10415	Odoribacter_splanchincus	Bla _{ul} a ₁ _producta	1
SPC10348	SPC10415	Parabacteroides_merdae	Bla _{ul} a ₁ _producta	+++
SPC03061	SPC10415	Roseburia_intestinalis	Bla _{ul} a ₁ _producta	---
SPC10348	SPC10415	Ruminococcus_gnavus	Bla _{ul} a ₁ _producta	+++
SPC10397	SPC10415	Ruminococcus_obetum	Bla _{ul} a ₁ _producta	---
SPC10233	SPC10415	Ruminococcus_torques	Bla _{ul} a ₁ _producta	---
SPC03015	SPC03021	Streptococcus_thermophilus	Bla _{ul} a ₁ _producta	---
SPC03015	SPC10415	Streptococcus_thermophilus	Bla _{ul} a ₁ _producta	---
SPC10211	SPC10403	Bacteroides_citcae	Bla _{ul} a ₁ _schinkii	+++
SPC10213	SPC10403	Bacteroides_eggerthii	Bla _{ul} a ₁ _schinkii	---
SPC10330	SPC10403	Bacteroides_ovatus	Bla _{ul} a ₁ _schinkii	---
SPC03006	SPC10403	Bacteroides_sp_1_1_6	Bla _{ul} a ₁ _schinkii	+++
SPC03007	SPC10403	Bacteroides_sp_3_1_23	Bla _{ul} a ₁ _schinkii	+
SPC03019	SPC10403	Bacteroides_sp_D20	Bla _{ul} a ₁ _schinkii	---
SPC03005	SPC10403	Bacteroides_vulgatus	Bla _{ul} a ₁ _schinkii	++
SPC10381	SPC10403	Bacteroides_vulgatus	Bla _{ul} a ₁ _schinkii	++
SPC10301	SPC10403	Bifidobacterium_adolescentis	Bla _{ul} a ₁ _schinkii	++
SPC10298	SPC10403	Bifidobacterium_pseudocatenulatum	Bla _{ul} a ₁ _schinkii	-
SPC03021	SPC10403	Bla _{ul} a ₁ _producta	Bla _{ul} a ₁ _schinkii	+++
SPC10403	SPC10403	Bla _{ul} a ₁ _schinkii	Bla _{ul} a ₁ _schinkii	+++
SPC10243	SPC10403	Clostridium_hattewayi	Bla _{ul} a ₁ _schinkii	---
SPC03026	SPC10403	Clostridium_nexile	Bla _{ul} a ₁ _schinkii	---
SPC03027	SPC10403	Clostridium_sp_HGF2	Bla _{ul} a ₁ _schinkii	---
SPC10355	SPC10403	Clostridium_symbiosum	Bla _{ul} a ₁ _schinkii	---
SPC10097	SPC10403	Collinsella_aerofaciens	Bla _{ul} a ₁ _schinkii	---
SPC03009	SPC10403	Coprobacillus_sp_B7	Bla _{ul} a ₁ _schinkii	+++
SPC03080	SPC10403	Coproccoccus_vatus	Bla _{ul} a ₁ _schinkii	+++
SPC10304	SPC10403	Coproccoccus_comes	Bla _{ul} a ₁ _schinkii	+++
SPC03018	SPC10403	Dorea_fornicigenans	Bla _{ul} a ₁ _schinkii	+
SPC03057	SPC10403	Dorea_longicatena	Bla _{ul} a ₁ _schinkii	+++
SPC03008	SPC10403	Enterococcus faecalis	Bla _{ul} a ₁ _schinkii	+++
SPC10301	SPC10403	Erysipelatrichaceae_bacterium	Bla _{ul} a ₁ _schinkii	---
SPC03001	SPC10403	Escherichia coli	Bla _{ul} a ₁ _schinkii	+++
SPC10110	SPC10403	Escherichia coli	Bla _{ul} a ₁ _schinkii	+++
SPC03022	SPC10403	Eubacterium eligens	Bla _{ul} a ₁ _schinkii	+
SPC10363	SPC10403	Eubacterium_rectale	Bla _{ul} a ₁ _schinkii	---
SPC03054	SPC10403	Faecalibacterium_prausnitzii	Bla _{ul} a ₁ _schinkii	---
SPC10386	SPC10403	Faecalibacterium_prausnitzii	Bla _{ul} a ₁ _schinkii	+++
SPC10390	SPC10403	Lachnospiraceae_bacterium_5_1_57FAA	Bla _{ul} a ₁ _schinkii	-
SPC03056	SPC10403	Odoribacter_splanchincus	Bla _{ul} a ₁ _schinkii	---
SPC10388	SPC10403	Odoribacter_splanchincus	Bla _{ul} a ₁ _schinkii	-

[illegible]

TABLE 5

[illegible]

TABLE 5

SPC00022	SPC00027	Eubacterium_eligens	Clostridium_sp_HGF2	
SPC00015	SPC00027	Streptococcus_thermophilus	Clostridium_sp_HGF2	+
SPC10211	SPC10355	Bacteroides_caccae	Clostridium_symbiosum	+++
SPC10213	SPC10355	Bacteroides_eggerthii	Clostridium_symbiosum	++++
SPC10030	SPC10355	Bacteroides_ovatus	Clostridium_symbiosum	
SPC00006	SPC10355	Bacteroides_sp_1_1_6	Clostridium_symbiosum	++++
SPC00007	SPC10355	Bacteroides_sp_3_1_23	Clostridium_symbiosum	++++
SPC10019	SPC10355	Bacteroides_sp_D20	Clostridium_symbiosum	
SPC00005	SPC10355	Bacteroides_vulgatus	Clostridium_symbiosum	+++
SPC10081	SPC10355	Bacteroides_vulgatus	Clostridium_symbiosum	
SPC10301	SPC10355	Bifidobacterium_adollescens	Clostridium_symbiosum	++++
SPC10298	SPC10355	Bifidobacterium_pseudocatenulatum	Clostridium_symbiosum	+
SPC00021	SPC10355	Blautia_producta	Clostridium_symbiosum	++++
SPC10256	SPC10355	Clostridium_butyricum	Clostridium_symbiosum	++++
SPC10358	SPC10355	Clostridium_oribacterium	Clostridium_symbiosum	++++
SPC10325	SPC10355	Clostridium_bolteae	Clostridium_symbiosum	++++
SPC10167	SPC10355	Clostridium_disporicum	Clostridium_symbiosum	++++
SPC10243	SPC10355	Clostridium_hathewayi	Clostridium_symbiosum	++++
SPC10313	SPC10355	Clostridium_hylemonae	Clostridium_symbiosum	+++
SPC10202	SPC10355	Clostridium_innocuum	Clostridium_symbiosum	++++
SPC10238	SPC10355	Clostridium_mayombae	Clostridium_symbiosum	++++
SPC00026	SPC10355	Clostridium_nexile	Clostridium_symbiosum	+
SPC00027	SPC10355	Clostridium_sp_HGF2	Clostridium_symbiosum	
SPC10355	SPC10355	Clostridium_symbiosum	Clostridium_symbiosum	+
SPC10355	SPC10355	Clostridium_symbiosum	Clostridium_symbiosum	++++
SPC10155	SPC10355	Clostridium_tertium	Clostridium_symbiosum	+
SPC10097	SPC10355	Collinsella_aerofaciens	Clostridium_symbiosum	+++
SPC10097	SPC10355	Collinsella_aerofaciens	Clostridium_symbiosum	++++
SPC00009	SPC10355	Coprobacillus_sp_D7	Clostridium_symbiosum	
SPC00080	SPC10355	Coproccoccus_catus	Clostridium_symbiosum	-
SPC10304	SPC10355	Coproccoccus_cornus	Clostridium_symbiosum	
SPC10304	SPC10355	Coproccoccus_cornus	Clostridium_symbiosum	++++
SPC00018	SPC10355	Dorea_formicigenans	Clostridium_symbiosum	
SPC00057	SPC10355	Dorea_longicatena	Clostridium_symbiosum	++++
SPC00008	SPC10355	Enterococcus_faecalis	Clostridium_symbiosum	++++
SPC10001	SPC10355	Erysipelotrichaceae_bacterium	Clostridium_symbiosum	
SPC00001	SPC10355	Escherichia_coli	Clostridium_symbiosum	++++
SPC10110	SPC10355	Escherichia_coli	Clostridium_symbiosum	++++
SPC00022	SPC10355	Eubacterium_eligens	Clostridium_symbiosum	+
SPC00054	SPC10355	Faecalibacterium_prausnitzii	Clostridium_symbiosum	
SPC00056	SPC10355	Odoribacter_splanchnicus	Clostridium_symbiosum	
SPC10048	SPC10355	Parabacteroides_merdae	Clostridium_symbiosum	-
SPC00061	SPC10355	Roseburia_intestinalis	Clostridium_symbiosum	—
SPC10197	SPC10355	Ruminococcus_obesus	Clostridium_symbiosum	++++
SPC10233	SPC10355	Ruminococcus_torques	Clostridium_symbiosum	++
SPC00015	SPC10355	Streptococcus_thermophilus	Clostridium_symbiosum	
SPC10167	SPC10155	Clostridium_disporicum	Clostridium_tertium	++++
SPC10155	SPC10155	Clostridium_tertium	Clostridium_tertium	++++
SPC10097	SPC10155	Collinsella_aerofaciens	Clostridium_tertium	
SPC10030	SPC10097	Bacteroides_ovatus	Collinsella_aerofaciens	++++
SPC00006	SPC10097	Bacteroides_sp_1_1_6	Collinsella_aerofaciens	++++
SPC00007	SPC10097	Bacteroides_sp_3_1_23	Collinsella_aerofaciens	++++
SPC10019	SPC10097	Bacteroides_sp_D20	Collinsella_aerofaciens	++++
SPC00005	SPC10097	Bacteroides_vulgatus	Collinsella_aerofaciens	++++

TABLE 5

SPC10081	Bacteroides_vulgatus	Collinsella_aerofaciens	+++
SPC10082	Blaulia_producta	Collinsella_aerofaciens	+++
SPC10086	Clostridium_nexile	Collinsella_aerofaciens	+
SPC10087	Clostridium_sp_HGF2	Collinsella_aerofaciens	+++
SPC10155	Clostridium_tetrum	Collinsella_aerofaciens	
SPC10097	Collinsella_aerofaciens	Collinsella_aerofaciens	+++
SPC10097	Collinsella_aerofaciens	Collinsella_aerofaciens	
SPC10097	Coprobaillus_sp_D7	Collinsella_aerofaciens	+++
SPC10097	Coproccoccus_catus	Collinsella_aerofaciens	+++
SPC10097	Dorea_fornicigeniens	Collinsella_aerofaciens	++
SPC10097	Dorea_longicatena	Collinsella_aerofaciens	+++
SPC10097	Enterococcus_faecalis	Collinsella_aerofaciens	+++
SPC10097	Erysipelotrichaceae_bacterium	Collinsella_aerofaciens	+++
SPC10097	Escherichia_coli	Collinsella_aerofaciens	+++
SPC10097	Subbacterium_eligens	Collinsella_aerofaciens	+++
SPC10097	Faecalibacterium_prausnitzii	Collinsella_aerofaciens	+++
SPC10097	Odoribacter_splanchnicus	Collinsella_aerofaciens	+++
SPC10097	Parabacteroides_merdiae	Collinsella_aerofaciens	+++
SPC10097	Roseburia_intestinalis	Collinsella_aerofaciens	++
SPC10097	Streptococcus_thermophilus	Collinsella_aerofaciens	+
SPC10009	Bacteroides_sp_1_1_6	Coprobaillus_sp_D7	+++
SPC10007	Bacteroides_sp_3_1_23	Coprobaillus_sp_D7	
SPC10009	Bacteroides_vulgatus	Coprobaillus_sp_D7	
SPC10009	Coprobaillus_sp_D7	Coprobaillus_sp_D7	
SPC10009	Enterococcus_faecalis	Coprobaillus_sp_D7	
SPC10009	Escherichia_coli	Coprobaillus_sp_D7	
SPC10080	Bacteroides_sp_1_1_6	Coproccoccus_catus	+++
SPC10080	Bacteroides_sp_3_1_23	Coproccoccus_catus	
SPC10080	Bacteroides_vulgatus	Coproccoccus_catus	+++
SPC10080	Blaulia_producta	Coproccoccus_catus	+
SPC10080	Clostridium_nexile	Coproccoccus_catus	+++
SPC10080	Clostridium_sp_HGF2	Coproccoccus_catus	
SPC10080	Coprobaillus_sp_D7	Coproccoccus_catus	
SPC10080	Coproccoccus_catus	Coproccoccus_catus	
SPC10080	Dorea_fornicigeniens	Coproccoccus_catus	
SPC10080	Dorea_longicatena	Coproccoccus_catus	
SPC10080	Enterococcus_faecalis	Coproccoccus_catus	
SPC10080	Escherichia_coli	Coproccoccus_catus	+++
SPC10080	Eubacterium_eligens	Coproccoccus_catus	+++
SPC10080	Faecalibacterium_prausnitzii	Coproccoccus_catus	
SPC10080	Odoribacter_splanchnicus	Coproccoccus_catus	
SPC10080	Roseburia_intestinalis	Coproccoccus_catus	
SPC10080	Streptococcus_thermophilus	Coproccoccus_catus	
SPC10304	Bacteroides_caccae	Coproccoccus_comes	+++
SPC10304	Bacteroides_eggerthii	Coproccoccus_comes	++
SPC10304	Bacteroides_ovatus	Coproccoccus_comes	+++
SPC10304	Bacteroides_sp_1_1_6	Coproccoccus_comes	+++
SPC10304	Bacteroides_sp_3_1_23	Coproccoccus_comes	
SPC10304	Bacteroides_sp_D20	Coproccoccus_comes	+++
SPC10304	Bacteroides_vulgatus	Coproccoccus_comes	+++
SPC10304	Bacteroides_vulgatus	Coproccoccus_comes	+++
SPC10301	Bifidobacterium_adolescentis	Coproccoccus_comes	+++
SPC10298	Bifidobacterium_pseudocatenulatum	Coproccoccus_comes	+++
SPC10304	Blaulia_producta	Coproccoccus_comes	+++

TABLE 5

SPC10256	SPC10304	<i>Clostridium butyricum</i>	<i>Coprococcus_cornes</i>	++++
SPC10167	SPC10304	<i>Clostridium disporicum</i>	<i>Coprococcus_cornes</i>	++++
SPC10243	SPC10304	<i>Clostridium hathewayi</i>	<i>Coprococcus_cornes</i>	++++
SPC10313	SPC10304	<i>Clostridium hylemonae</i>	<i>Coprococcus_cornes</i>	+
SPC10202	SPC10304	<i>Clostridium innocuum</i>	<i>Coprococcus_cornes</i>	++++
SPC10238	SPC10304	<i>Clostridium mayombel</i>	<i>Coprococcus_cornes</i>	++++
SPC00026	SPC10304	<i>Clostridium nexile</i>	<i>Coprococcus_cornes</i>	
SPC00027	SPC10304	<i>Clostridium_sp_HGF2</i>	<i>Coprococcus_cornes</i>	
SPC10155	SPC10304	<i>Clostridium tertium</i>	<i>Coprococcus_cornes</i>	++++
SPC10097	SPC10304	<i>Collinsella aerofaciens</i>	<i>Coprococcus_cornes</i>	++++
SPC10097	SPC10304	<i>Collinsella aerofaciens</i>	<i>Coprococcus_cornes</i>	++
SPC00009	SPC10304	<i>Coprobacillus_sp_D7</i>	<i>Coprococcus_cornes</i>	++
SPC00080	SPC10304	<i>Coprococcus_catus</i>	<i>Coprococcus_cornes</i>	--
SPC10304	SPC10304	<i>Coprococcus_cornes</i>	<i>Coprococcus_cornes</i>	
SPC10304	SPC10304	<i>Coprococcus_cornes</i>	<i>Coprococcus_cornes</i>	++
SPC00018	SPC10304	<i>Dorea_formicigenerans</i>	<i>Coprococcus_cornes</i>	
SPC00057	SPC10304	<i>Dorea_longicatena</i>	<i>Coprococcus_cornes</i>	
SPC00008	SPC10304	<i>Enterococcus faecalis</i>	<i>Coprococcus_cornes</i>	++++
SPC10001	SPC10304	<i>Erysipelotrichaceae_bacterium</i>	<i>Coprococcus_cornes</i>	-
SPC00001	SPC10304	<i>Escherichia coli</i>	<i>Coprococcus_cornes</i>	++++
SPC10110	SPC10304	<i>Escherichia coli</i>	<i>Coprococcus_cornes</i>	++++
SPC00022	SPC10304	<i>Eubacterium eligens</i>	<i>Coprococcus_cornes</i>	++
SPC00054	SPC10304	<i>Faecalibacterium prausnitzii</i>	<i>Coprococcus_cornes</i>	
SPC00056	SPC10304	<i>Odoribacter_splanchnicus</i>	<i>Coprococcus_cornes</i>	-
SPC10048	SPC10304	<i>Parabacteroides merdae</i>	<i>Coprococcus_cornes</i>	-
SPC00061	SPC10304	<i>Roseburia intestinalis</i>	<i>Coprococcus_cornes</i>	-
SPC10197	SPC10304	<i>Ruminococcus obeum</i>	<i>Coprococcus_cornes</i>	++++
SPC10233	SPC10304	<i>Ruminococcus torques</i>	<i>Coprococcus_cornes</i>	++++
SPC00015	SPC10304	<i>Streptococcus thermophilus</i>	<i>Coprococcus_cornes</i>	++
SPC00006	SPC00018	<i>Bacteroides_sp_1_1_6</i>	<i>Dorea_formicigenerans</i>	+++
SPC00007	SPC00018	<i>Bacteroides_sp_3_1_23</i>	<i>Dorea_formicigenerans</i>	
SPC00005	SPC00018	<i>Bacteroides_vulgatus</i>	<i>Dorea_formicigenerans</i>	++
SPC00009	SPC00018	<i>Coprobacillus_sp_D7</i>	<i>Dorea_formicigenerans</i>	-
SPC00018	SPC00018	<i>Dorea_formicigenerans</i>	<i>Dorea_formicigenerans</i>	--
SPC00008	SPC00018	<i>Enterococcus faecalis</i>	<i>Dorea_formicigenerans</i>	++++
SPC00001	SPC00018	<i>Escherichia coli</i>	<i>Dorea_formicigenerans</i>	++
SPC00015	SPC00018	<i>Streptococcus thermophilus</i>	<i>Dorea_formicigenerans</i>	
SPC00006	SPC00057	<i>Bacteroides_sp_1_1_6</i>	<i>Dorea_longicatena</i>	++++
SPC00007	SPC00057	<i>Bacteroides_sp_3_1_23</i>	<i>Dorea_longicatena</i>	+++
SPC00005	SPC00057	<i>Bacteroides_vulgatus</i>	<i>Dorea_longicatena</i>	++++
SPC00021	SPC00057	<i>Blautia producta</i>	<i>Dorea_longicatena</i>	++++
SPC00026	SPC00057	<i>Clostridium nexile</i>	<i>Dorea_longicatena</i>	
SPC00027	SPC00057	<i>Clostridium_sp_HGF2</i>	<i>Dorea_longicatena</i>	--
SPC00009	SPC00057	<i>Coprobacillus_sp_D7</i>	<i>Dorea_longicatena</i>	
SPC00018	SPC00057	<i>Dorea_formicigenerans</i>	<i>Dorea_longicatena</i>	++
SPC00057	SPC00057	<i>Dorea_longicatena</i>	<i>Dorea_longicatena</i>	-
SPC00008	SPC00057	<i>Enterococcus faecalis</i>	<i>Dorea_longicatena</i>	++++
SPC00001	SPC00057	<i>Escherichia coli</i>	<i>Dorea_longicatena</i>	++++
SPC00022	SPC00057	<i>Eubacterium eligens</i>	<i>Dorea_longicatena</i>	++
SPC00054	SPC00057	<i>Faecalibacterium prausnitzii</i>	<i>Dorea_longicatena</i>	--
SPC00056	SPC00057	<i>Odoribacter_splanchnicus</i>	<i>Dorea_longicatena</i>	
SPC00015	SPC00057	<i>Streptococcus thermophilus</i>	<i>Dorea_longicatena</i>	+
SPC00006	SPC00008	<i>Bacteroides_sp_1_1_6</i>	<i>Enterococcus faecalis</i>	++++
SPC00007	SPC00008	<i>Bacteroides_sp_3_1_23</i>	<i>Enterococcus faecalis</i>	++++

TABLE 5

SPC00005	Bacteroides_vulgatus	Enterococcus_faecalis	+++
SPC00008	Enterococcus_faecalis	Enterococcus_faecalis	+++
SPC00001	Escherichia_coli	Enterococcus_faecalis	+++
SPC00006	Bacteroides_sp_1_1_6	Erysipelotrichaceae_bacterium	+++
SPC00007	Bacteroides_sp_3_1_23	Erysipelotrichaceae_bacterium	+
SPC00005	Bacteroides_vulgatus	Erysipelotrichaceae_bacterium	+++
SPC00021	Blautia_producta	Erysipelotrichaceae_bacterium	
SPC00026	Blautia_nexile	Erysipelotrichaceae_bacterium	
SPC00027	Clostridium_sp_Hsf2	Erysipelotrichaceae_bacterium	---
SPC00009	Corrobacillus_sp_D7	Erysipelotrichaceae_bacterium	-
SPC00060	Coproccoccus_catus	Erysipelotrichaceae_bacterium	
SPC00018	Dorea_fornicigenans	Erysipelotrichaceae_bacterium	---
SPC00057	Dorea_longicatena	Erysipelotrichaceae_bacterium	
SPC00001	Enterococcus_faecalis	Erysipelotrichaceae_bacterium	+++
SPC00001	Erysipelotrichaceae_bacterium	Erysipelotrichaceae_bacterium	-
SPC00001	Escherichia_coli	Erysipelotrichaceae_bacterium	+++
SPC00022	Eubacterium_eligens	Erysipelotrichaceae_bacterium	-
SPC00054	Faecalibacterium_prausnitzii	Erysipelotrichaceae_bacterium	
SPC00056	Oribacter_splanchnicus	Erysipelotrichaceae_bacterium	
SPC00061	Roseburia_intestinalis	Erysipelotrichaceae_bacterium	
SPC00015	Streptococcus_thermophilus	Erysipelotrichaceae_bacterium	-
SPC00030	Bacteroides_ovatus	Escherichia_coli	+++
SPC00006	Bacteroides_sp_3_1_6	Escherichia_coli	+++
SPC00007	Bacteroides_sp_3_1_23	Escherichia_coli	+++
SPC00019	Bacteroides_sp_D20	Escherichia_coli	+++
SPC00005	Bacteroides_vulgatus	Escherichia_coli	+++
SPC00021	Blautia_producta	Escherichia_coli	+++
SPC00036	Clostridium_nexile	Escherichia_coli	+++
SPC00027	Clostridium_sp_Hsf2	Escherichia_coli	+++
SPC00097	Collinsella_aerofaciens	Escherichia_coli	+++
SPC00009	Corrobacillus_sp_D7	Escherichia_coli	++
SPC00060	Coproccoccus_catus	Escherichia_coli	+++
SPC00018	Dorea_fornicigenans	Escherichia_coli	+++
SPC00057	Dorea_longicatena	Escherichia_coli	+++
SPC00008	Enterococcus_faecalis	Escherichia_coli	+++
SPC00001	Erysipelotrichaceae_bacterium	Escherichia_coli	+++
SPC00001	Escherichia_coli	Escherichia_coli	+++
SPC00001	Escherichia_coli	Escherichia_coli	+++
SPC00022	Eubacterium_eligens	Escherichia_coli	+++
SPC00054	Faecalibacterium_prausnitzii	Escherichia_coli	+++
SPC00056	Oribacter_splanchnicus	Escherichia_coli	+++
SPC00048	Parabacteroides_merdae	Escherichia_coli	+++
SPC00061	Roseburia_intestinalis	Escherichia_coli	+++
SPC00015	Streptococcus_thermophilus	Escherichia_coli	+++
SPC00006	Bacteroides_sp_1_1_6	Escherichia_coli	+++
SPC00022	Bacteroides_sp_3_1_23	Eubacterium_eligens	+++
SPC00005	Bacteroides_vulgatus	Eubacterium_eligens	+++
SPC00021	Blautia_producta	Eubacterium_eligens	+++
SPC00009	Coproccoccus_sp_D7	Eubacterium_eligens	+++
SPC00018	Dorea_fornicigenans	Eubacterium_eligens	---
SPC00008	Enterococcus_faecalis	Eubacterium_eligens	+++
SPC00001	Escherichia_coli	Eubacterium_eligens	++

TABLE 5

SPC000022	Eubacterium_eligans	Eubacterium_eligans	+++
SPC000022	Streptococcus_thermophilus	Eubacterium_eligans	+++
SPC10363	Bacteroides_caccae	Eubacterium_rectale	+++
SPC10363	Bacteroides_eggerthii	Eubacterium_rectale	+++
SPC10363	Bacteroides_ovatus	Eubacterium_rectale	+++
SPC10363	Bacteroides_sp_1_1_6	Eubacterium_rectale	+++
SPC10363	Bacteroides_sp_3_1_23	Eubacterium_rectale	+++
SPC10363	Bacteroides_sp_D20	Eubacterium_rectale	+++
SPC10363	Bacteroides_vulgalis	Eubacterium_rectale	+++
SPC10363	Bacteroides_vulgaris	Eubacterium_rectale	+++
SPC10363	Bifidobacterium_adolescentis	Eubacterium_rectale	+++
SPC10363	Bifidobacterium_pseudocatenulatum	Eubacterium_rectale	+++
SPC10363	Blautia_producta	Eubacterium_rectale	+++
SPC10363	Blautia_producta	Eubacterium_rectale	+++
SPC10363	Clostridium_butylicum	Eubacterium_rectale	+++
SPC10363	Clostridium_orbiscindens	Eubacterium_rectale	+++
SPC10363	Clostridium_bollee	Eubacterium_rectale	+++
SPC10363	Clostridium_disporicum	Eubacterium_rectale	+++
SPC10363	Clostridium_hathewayi	Eubacterium_rectale	+++
SPC10363	Clostridium_hylemonae	Eubacterium_rectale	+++
SPC10363	Clostridium_innocuum	Eubacterium_rectale	+++
SPC10363	Clostridium_mayombei	Eubacterium_rectale	+++
SPC10363	Clostridium_nexile	Eubacterium_rectale	+++
SPC10363	Clostridium_sp_HGF2	Eubacterium_rectale	+++
SPC10363	Clostridium_symbiosum	Eubacterium_rectale	+++
SPC10363	Clostridium_symbiosum	Eubacterium_rectale	+++
SPC10363	Clostridium_tartarum	Eubacterium_rectale	+++
SPC10363	Collinsella_aerofaciens	Eubacterium_rectale	+++
SPC10363	Collinsella_aerofaciens	Eubacterium_rectale	+++
SPC10363	Coprobaillus_sp_D7	Eubacterium_rectale	+++
SPC10363	Coproccoccus_catus	Eubacterium_rectale	+++
SPC10363	Coproccoccus_catus	Eubacterium_rectale	+++
SPC10363	Coproccoccus_cornes	Eubacterium_rectale	+++
SPC10363	Coproccoccus_cornes	Eubacterium_rectale	+++
SPC10363	Dorea_fornikigenans	Eubacterium_rectale	+++
SPC10363	Dorea_longicatena	Eubacterium_rectale	+++
SPC10363	Enterococcus_faecalis	Eubacterium_rectale	+++
SPC10363	Erysipelotrichaceae_bacterium	Eubacterium_rectale	+++
SPC10363	Escherichia_coli	Eubacterium_rectale	+++
SPC10363	Escherichia_coli	Eubacterium_rectale	+++
SPC10363	Eubacterium_eligans	Eubacterium_rectale	+++
SPC10363	Eubacterium_rectale	Eubacterium_rectale	+++
SPC10363	Eubacterium_rectale	Eubacterium_rectale	+++
SPC10363	Faecalibacterium_prausnitzii	Eubacterium_rectale	+++
SPC10363	Faecalibacterium_prausnitzii	Eubacterium_rectale	+++
SPC10363	Lachnospiraceae_bacterium_5_1_57FAA	Eubacterium_rectale	+++
SPC10363	Odeibacter_sphaerichus	Eubacterium_rectale	+++
SPC10363	Parabacteroides_merdae	Eubacterium_rectale	+++
SPC10363	Roseburia_intestinalis	Eubacterium_rectale	+++
SPC10363	Ruminococcus_bromii	Eubacterium_rectale	+++
SPC10363	Ruminococcus_gnavus	Eubacterium_rectale	+++
SPC10363	Ruminococcus_obscurus	Eubacterium_rectale	+++
SPC10363	Ruminococcus_torques	Eubacterium_rectale	+++
SPC10363	Streptococcus_thermophilus	Eubacterium_rectale	+++
SPC10363	Bacteroides_caccae	Faecalibacterium_prausnitzii	+++

TABLE 5

SPC10213	Bacteroides_eggertii	Faecalibacterium_prausnitzii	-
SPC10386	Bacteroides_ovatus	Faecalibacterium_prausnitzii	-
SPC00054	Bacteroides_sp_1_1_5	Faecalibacterium_prausnitzii	+++
SPC10386	Bacteroides_sp_1_1_5	Faecalibacterium_prausnitzii	+++
SPC100154	Bacteroides_sp_3_1_23	Faecalibacterium_prausnitzii	++
SPC10386	Bacteroides_sp_3_1_23	Faecalibacterium_prausnitzii	++
SPC10019	Bacteroides_sp_D20	Faecalibacterium_prausnitzii	---
SPC00054	Bacteroides_vulgatus	Faecalibacterium_prausnitzii	+++
SPC10386	Bacteroides_vulgatus	Faecalibacterium_prausnitzii	+++
SPC10084	Bifidobacterium_adolescentis	Faecalibacterium_prausnitzii	---
SPC10386	Bifidobacterium_adolescentis	Faecalibacterium_prausnitzii	+++
SPC10021	Blautia_producta	Faecalibacterium_prausnitzii	+++
SPC10386	Blautia_producta	Faecalibacterium_prausnitzii	+++
SPC10256	Clostridium_butylicum	Faecalibacterium_prausnitzii	+++
SPC10386	Clostridium_oriscidens	Faecalibacterium_prausnitzii	+++
SPC10358	Clostridium_bollee	Faecalibacterium_prausnitzii	++
SPC10325	Clostridium_disporicum	Faecalibacterium_prausnitzii	++
SPC10386	Clostridium_hathewayi	Faecalibacterium_prausnitzii	+++
SPC10243	Clostridium_hylemonae	Faecalibacterium_prausnitzii	+++
SPC10313	Clostridium_hylemonae	Faecalibacterium_prausnitzii	+++
SPC10202	Clostridium_innocuum	Faecalibacterium_prausnitzii	+++
SPC10386	Clostridium_innocuum	Faecalibacterium_prausnitzii	+++
SPC10238	Clostridium_mayombel	Faecalibacterium_prausnitzii	+++
SPC00026	Clostridium_nexile	Faecalibacterium_prausnitzii	---
SPC100154	Clostridium_nexile	Faecalibacterium_prausnitzii	---
SPC10386	Clostridium_sp_HGF2	Faecalibacterium_prausnitzii	++
SPC00027	Clostridium_sp_HGF2	Faecalibacterium_prausnitzii	---
SPC10386	Clostridium_symbiosum	Faecalibacterium_prausnitzii	---
SPC10355	Clostridium_symbiosum	Faecalibacterium_prausnitzii	+++
SPC10386	Clostridium_tetrum	Faecalibacterium_prausnitzii	+++
SPC10355	Collinsella_aerofaciens	Faecalibacterium_prausnitzii	+++
SPC10097	Collinsella_aerofaciens	Faecalibacterium_prausnitzii	+++
SPC10097	Collinsella_aerofaciens	Faecalibacterium_prausnitzii	+++
SPC00009	Controbacillus_sp_D7	Faecalibacterium_prausnitzii	---
SPC10386	Controbacillus_sp_D7	Faecalibacterium_prausnitzii	---
SPC00054	Coproccoccus_catus	Faecalibacterium_prausnitzii	---
SPC10386	Coproccoccus_catus	Faecalibacterium_prausnitzii	---
SPC10304	Coproccoccus_comes	Faecalibacterium_prausnitzii	++
SPC10386	Coproccoccus_comes	Faecalibacterium_prausnitzii	++
SPC00054	Dorea_fornicigenans	Faecalibacterium_prausnitzii	---
SPC10386	Dorea_fornicigenans	Faecalibacterium_prausnitzii	---
SPC10057	Dorea_forgicateni	Faecalibacterium_prausnitzii	+++
SPC00054	Enterococcus_faecalis	Faecalibacterium_prausnitzii	+++
SPC10386	Enterococcus_faecalis	Faecalibacterium_prausnitzii	+++
SPC00008	Enterococcus_faecalis	Faecalibacterium_prausnitzii	+++
SPC10001	Erysipelatrichaceae_bacterium	Faecalibacterium_prausnitzii	---
SPC00001	Escherichia_coli	Faecalibacterium_prausnitzii	+++
SPC10386	Escherichia_coli	Faecalibacterium_prausnitzii	+++
SPC10110	Escherichia_coli	Faecalibacterium_prausnitzii	+++
SPC00022	Eubacterium_eligens	Faecalibacterium_prausnitzii	++
SPC10386	Eubacterium_eligens	Faecalibacterium_prausnitzii	++
SPC10022	Eubacterium_rectale	Faecalibacterium_prausnitzii	+
SPC10363	Faecalibacterium_prausnitzii	Faecalibacterium_prausnitzii	+
SPC00054	Faecalibacterium_prausnitzii	Faecalibacterium_prausnitzii	+
SPC10054	Faecalibacterium_prausnitzii	Faecalibacterium_prausnitzii	+
SPC10386	Faecalibacterium_prausnitzii	Faecalibacterium_prausnitzii	+
SPC10386	Faecalibacterium_prausnitzii	Faecalibacterium_prausnitzii	+++
SPC10386	Faecalibacterium_prausnitzii	Faecalibacterium_prausnitzii	---
SPC00056	Odoibacter_splanchnicus	Faecalibacterium_prausnitzii	---

TABLE 5

SPC10048	SPC10386	Parabacteroides_merdae	Faecalibacterium_prausnitzii	-
SPC00061	SPC10386	Roseburia_intestinalis	Faecalibacterium_prausnitzii	-
SPC10197	SPC10386	Ruminococcus_obrum	Faecalibacterium_prausnitzii	+++
SPC10133	SPC10386	Ruminococcus_torques	Faecalibacterium_prausnitzii	---
SPC00015	SPC10354	Streptococcus_thermophilus	Faecalibacterium_prausnitzii	+++
SPC00015	SPC10390	Streptococcus_thermophilus	Faecalibacterium_prausnitzii	---
SPC10211	SPC10390	Bacteroides_caccae	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10213	SPC10390	Bacteroides_eggerthii	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10030	SPC10390	Bacteroides_ovatus	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC00066	SPC10390	Bacteroides_sp_3_1_5	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00007	SPC10390	Bacteroides_sp_3_1_23	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10019	SPC10390	Bacteroides_sp_D20	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10005	SPC10390	Bacteroides_vulgatus	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10081	SPC10390	Bacteroides_vulgatus	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10301	SPC10390	Bifidobacterium_adlercrentis	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10298	SPC10390	Bifidobacterium_pseudocatenulatum	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00021	SPC10390	Blautia_producta	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10415	SPC10390	Blautia_producta	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10256	SPC10390	Clostridium_butylicum	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10358	SPC10390	Clostridium_oriscandens	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10326	SPC10390	Clostridium_bolae	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10167	SPC10390	Clostridium_disporicum	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10243	SPC10390	Clostridium_hathewayi	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10313	SPC10390	Clostridium_hylemonae	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10202	SPC10390	Clostridium_innocuum	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10238	SPC10390	Clostridium_mayonbel	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00026	SPC10390	Clostridium_nexile	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC00027	SPC10390	Clostridium_sp_HCF2	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10355	SPC10390	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	+
SPC10355	SPC10390	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10155	SPC10390	Clostridium_tartum	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10097	SPC10390	Collinsella_aerofaciens	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10097	SPC10390	Collinsella_aerofaciens	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00009	SPC10390	Coprobaecillus_sp_D7	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00080	SPC10390	Coproccoccus_ratus	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10304	SPC10390	Coproccoccus_ratus	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10304	SPC10390	Coproccoccus_ratus	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00018	SPC10390	Dorea_fornicigenans	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC00057	SPC10390	Dorea_fornicigenans	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00008	SPC10390	Enterococcus_faecalis	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10001	SPC10390	Erysipelatrichaceae_bacterium	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10001	SPC10390	Escherichia_coli	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10110	SPC10390	Escherichia_coli	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC00022	SPC10390	Eubacterium_eligans	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10363	SPC10390	Eubacterium_rectale	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC00054	SPC10390	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10386	SPC10390	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10386	SPC10390	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10386	SPC10390	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10390	SPC10390	Lachnospiraceae_bacterium_5_1_57FAA	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10390	SPC10390	Lachnospiraceae_bacterium_5_1_57FAA	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC00056	SPC10390	Odoribacter_splanchnicus	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10388	SPC10390	Odoribacter_splanchnicus	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10048	SPC10390	Parabacteroides_merdae	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC00061	SPC10390	Roseburia_intestinalis	Lachnospiraceae_bacterium_5_1_57FAA	---

TABLE 5

SPC103197	Ruminococcus, obeum	Lachnospiraceae_bacterium_5_1_57FAA	----
SPC103990	Ruminococcus, obeum	Lachnospiraceae_bacterium_5_1_57FAA	----
SPC103233	Ruminococcus, tortuosus	Lachnospiraceae_bacterium_5_1_57FAA	----
SPC103990	Streptococcus, thermophilus	Lachnospiraceae_bacterium_5_1_57FAA	----
SPC1030015	Bacteroides, coccae	Odobacter, splanchnicus	----
SPC103898	Bacteroides, eggerthii	Odobacter, splanchnicus	----
SPC103888	Bacteroides, ovatus	Odobacter, splanchnicus	----
SPC103056	Bacteroides, sp_1_1_6	Odobacter, splanchnicus	----
SPC103888	Bacteroides, sp_1_1_6	Odobacter, splanchnicus	----
SPC103006	Bacteroides, sp_3_1_23	Odobacter, splanchnicus	----
SPC103056	Bacteroides, sp_3_1_23	Odobacter, splanchnicus	----
SPC103888	Bacteroides, sp_120	Odobacter, splanchnicus	----
SPC103888	Bacteroides, vulgatus	Odobacter, splanchnicus	----
SPC103888	Bacteroides, vulgatus	Odobacter, splanchnicus	----
SPC103888	Bacteroides, vulgatus	Odobacter, splanchnicus	----
SPC103888	Bifidobacterium, adolescentis	Odobacter, splanchnicus	----
SPC103888	Bifidobacterium, pseudocatenulatum	Odobacter, splanchnicus	----
SPC103888	Blautia, producta	Odobacter, splanchnicus	----
SPC103056	Blautia, producta	Odobacter, splanchnicus	----
SPC103888	Clostridium, hathewayi	Odobacter, splanchnicus	----
SPC103888	Clostridium, nexile	Odobacter, splanchnicus	----
SPC103056	Clostridium, nexile	Odobacter, splanchnicus	----
SPC103888	Clostridium, sp_HGF2	Odobacter, splanchnicus	----
SPC103056	Clostridium, sp_HGF2	Odobacter, splanchnicus	----
SPC103888	Clostridium, symbiosum	Odobacter, splanchnicus	----
SPC103888	Clostridia_aerofaciens	Odobacter, splanchnicus	----
SPC103056	Coprobaecillus, sp_D7	Odobacter, splanchnicus	----
SPC103888	Coprobaecillus, sp_D7	Odobacter, splanchnicus	----
SPC103888	Coproccoccus, catus	Odobacter, splanchnicus	----
SPC103888	Coproccoccus, catus	Odobacter, splanchnicus	----
SPC103888	Coproccoccus, conies	Odobacter, splanchnicus	----
SPC103888	Dorea, formicigenerans	Odobacter, splanchnicus	----
SPC103056	Dorea, formicigenerans	Odobacter, splanchnicus	----
SPC103888	Dorea, longicatena	Odobacter, splanchnicus	----
SPC103888	Dorea, longicatena	Odobacter, splanchnicus	----
SPC103056	Enterococcus, faecalis	Odobacter, splanchnicus	----
SPC103888	Enterococcus, faecalis	Odobacter, splanchnicus	----
SPC103888	Erysipelatrichaceae_bacterium	Odobacter, splanchnicus	----
SPC103888	Erysipelatrichaceae_bacterium	Odobacter, splanchnicus	----
SPC103001	Escherichia, coli	Odobacter, splanchnicus	----
SPC103056	Escherichia, coli	Odobacter, splanchnicus	----
SPC103888	Escherichia, coli	Odobacter, splanchnicus	----
SPC103888	Escherichia, coli	Odobacter, splanchnicus	----
SPC103888	Eubacterium, eligens	Odobacter, splanchnicus	----
SPC103888	Eubacterium, eligens	Odobacter, splanchnicus	----
SPC1030022	Eubacterium, rectale	Odobacter, splanchnicus	----
SPC103888	Eubacterium, rectale	Odobacter, splanchnicus	----
SPC103888	Faecalibacterium, prausnitzii	Odobacter, splanchnicus	----
SPC103056	Faecalibacterium, prausnitzii	Odobacter, splanchnicus	----
SPC103888	Faecalibacterium, prausnitzii	Odobacter, splanchnicus	----
SPC103888	Faecalibacterium, prausnitzii	Odobacter, splanchnicus	----
SPC103056	Odobacter, splanchnicus	Odobacter, splanchnicus	----
SPC103888	Odobacter, splanchnicus	Odobacter, splanchnicus	----
SPC103888	Odobacter, splanchnicus	Odobacter, splanchnicus	----
SPC103888	Odobacter, splanchnicus	Odobacter, splanchnicus	----
SPC103888	Parabacteroides, merdae	Odobacter, splanchnicus	----
SPC103888	Roseburia, intestinalis	Odobacter, splanchnicus	----
SPC103888	Roseburia, intestinalis	Odobacter, splanchnicus	----
SPC103888	Ruminococcus, obeum	Odobacter, splanchnicus	----
SPC103888	Ruminococcus, tortuosus	Odobacter, splanchnicus	----
SPC103056	Streptococcus, thermophilus	Odobacter, splanchnicus	----
SPC103888	Streptococcus, thermophilus	Odobacter, splanchnicus	----
SPC103048	Bacteroides, ovatus	Parabacteroides, merdae	----

TABLE 5

SPC00006	SPC10048	Bacteroides_sp_1_1_6	Parabacteroides_merdae	+++
SPC00007	SPC10048	Bacteroides_sp_3_1_23	Parabacteroides_merdae	+++
SPC10019	SPC10048	Bacteroides_sp_D20	Parabacteroides_merdae	+++
SPC00005	SPC10048	Bacterioides_vulgalis	Parabacteroides_merdae	+++
SPC00021	SPC10048	Blautia_producta	Parabacteroides_merdae	+++
SPC00026	SPC10048	Clostridium_nexile	Parabacteroides_merdae	++
SPC00027	SPC10048	Clostridium_sp_HGF2	Parabacteroides_merdae	+++
SPC00009	SPC10048	Coprobaillus_sp_D7	Parabacteroides_merdae	-
SPC00080	SPC10048	Coproccoccus_catus	Parabacteroides_merdae	+++
SPC00018	SPC10048	Dorea_fornicigeniens	Parabacteroides_merdae	+++
SPC00057	SPC10048	Dorea_longicatena	Parabacteroides_merdae	+++
SPC00008	SPC10048	Enterococcus_faecalis	Parabacteroides_merdae	+++
SPC10001	SPC10048	Erysipelotrichaceae_bacterium	Parabacteroides_merdae	+++
SPC10048	SPC10048	Escherichia_coli	Parabacteroides_merdae	+++
SPC00027	SPC10048	Fubacterium_eligens	Parabacteroides_merdae	+
SPC00054	SPC10048	Faecalibacterium_prausnitzii	Parabacteroides_merdae	+++
SPC00056	SPC10048	Odoribacter_splanchnicus	Parabacteroides_merdae	+++
SPC10048	SPC10048	Parabacteroides_merdae	Parabacteroides_merdae	+++
SPC00061	SPC10048	Roseburia_intestinalis	Parabacteroides_merdae	+++
SPC00015	SPC10048	Streptococcus_thermophilus	Parabacteroides_merdae	+++
SPC00006	SPC00061	Bacteroides_sp_1_1_6	Roseburia_intestinalis	+++
SPC00007	SPC00061	Bacteroides_sp_3_1_23	Roseburia_intestinalis	+
SPC00005	SPC00061	Bacteroides_vulgalis	Roseburia_intestinalis	+
SPC00021	SPC00061	Blautia_producta	Roseburia_intestinalis	+++
SPC00026	SPC00061	Clostridium_nexile	Roseburia_intestinalis	-
SPC00027	SPC00061	Clostridium_sp_HGF2	Roseburia_intestinalis	-
SPC00009	SPC00061	Coprobaillus_sp_D7	Roseburia_intestinalis	-
SPC00018	SPC00061	Dorea_fornicigeniens	Roseburia_intestinalis	+++
SPC00057	SPC00061	Dorea_longicatena	Roseburia_intestinalis	+++
SPC00008	SPC00061	Enterococcus_faecalis	Roseburia_intestinalis	+++
SPC00001	SPC00061	Escherichia_coli	Roseburia_intestinalis	+++
SPC00022	SPC00061	Fubacterium_eligens	Roseburia_intestinalis	-
SPC00054	SPC00061	Faecalibacterium_prausnitzii	Roseburia_intestinalis	+++
SPC00056	SPC00061	Odoribacter_splanchnicus	Roseburia_intestinalis	+++
SPC00061	SPC00061	Roseburia_intestinalis	Roseburia_intestinalis	-
SPC00015	SPC00061	Streptococcus_thermophilus	Roseburia_intestinalis	+++
SPC10415	SPC10470	Blautia_producta	Ruminococcus_bromii	+++
SPC10256	SPC10470	Clostridium_butylicum	Ruminococcus_bromii	+++
SPC10358	SPC10470	Clostridium_orbichidens	Ruminococcus_bromii	+++
SPC10325	SPC10470	Clostridium_bolteae	Ruminococcus_bromii	+++
SPC10467	SPC10470	Clostridium_disporicum	Ruminococcus_bromii	+++
SPC10313	SPC10470	Clostridium_hylaeonae	Ruminococcus_bromii	+++
SPC10202	SPC10470	Clostridium_introctum	Ruminococcus_bromii	+++
SPC10238	SPC10470	Clostridium_nakombei	Ruminococcus_bromii	+++
SPC10355	SPC10470	Clostridium_symbiosum	Ruminococcus_bromii	+++
SPC10155	SPC10470	Clostridium_terrium	Ruminococcus_bromii	+++
SPC10097	SPC10470	Collinsella_aerofaciens	Ruminococcus_bromii	+++
SPC10304	SPC10470	Coproccoccus_comes	Ruminococcus_bromii	+
SPC10367	SPC10470	Fubacterium_rectale	Ruminococcus_bromii	+++
SPC10386	SPC10470	Faecalibacterium_prausnitzii	Ruminococcus_bromii	+++
SPC10390	SPC10470	Lachnospiraceae_bacterium_5_1_5TFAA	Ruminococcus_bromii	+++
SPC10470	SPC10470	Ruminococcus_bromii	Ruminococcus_bromii	+++
SPC10468	SPC10470	Ruminococcus_gnavus	Ruminococcus_bromii	+++
SPC10415	SPC10468	Blautia_producta	Ruminococcus_gnavus	+++

TABLE 5

SPC10256	SPC10468	<i>Clostridium butyricum</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10358	SPC10468	<i>Clostridium orbiscindens</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10325	SPC10468	<i>Clostridium bolleae</i>	<i>Ruminococcus_gnavus</i>	+++
SPC10167	SPC10468	<i>Clostridium disporicum</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10313	SPC10468	<i>Clostridium hylemonae</i>	<i>Ruminococcus_gnavus</i>	+++
SPC10202	SPC10468	<i>Clostridium innocuum</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10238	SPC10468	<i>Clostridium mayombi</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10355	SPC10468	<i>Clostridium symbiosum</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10155	SPC10468	<i>Clostridium tertium</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10097	SPC10468	<i>Collinsella aerofaciens</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10304	SPC10468	<i>Coprococcus comes</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10386	SPC10468	<i>Faecalibacterium prausnitzii</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10390	SPC10468	<i>Lachnospiraceae_bacterium_5_1_57FAA</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10470	SPC10468	<i>Ruminococcus bromii</i>	<i>Ruminococcus_gnavus</i>	++++
SPC10468	SPC10468	<i>Ruminococcus_gnavus</i>	<i>Ruminococcus_gnavus</i>	+++
SPC10030	SPC10197	<i>Bacteroides ovatus</i>	<i>Ruminococcus obeum</i>	++
SPC00006	SPC10197	<i>Bacteroides_sp_1_1_6</i>	<i>Ruminococcus obeum</i>	+++
SPC00007	SPC10197	<i>Bacteroides_sp_3_1_23</i>	<i>Ruminococcus obeum</i>	+++
SPC10019	SPC10197	<i>Bacteroides_sp_D20</i>	<i>Ruminococcus obeum</i>	++++
SPC00005	SPC10197	<i>Bacteroides vulgatus</i>	<i>Ruminococcus obeum</i>	++++
SPC10081	SPC10197	<i>Bacteroides vulgatus</i>	<i>Ruminococcus obeum</i>	++++
SPC00021	SPC10197	<i>Blautia producta</i>	<i>Ruminococcus obeum</i>	-
SPC00026	SPC10197	<i>Clostridium nexile</i>	<i>Ruminococcus obeum</i>	-
SPC00027	SPC10197	<i>Clostridium_sp_HGF2</i>	<i>Ruminococcus obeum</i>	++++
SPC10097	SPC10197	<i>Collinsella aerofaciens</i>	<i>Ruminococcus obeum</i>	+
SPC00009	SPC10197	<i>Coprobacillus_sp_D7</i>	<i>Ruminococcus obeum</i>	++++
SPC00080	SPC10197	<i>Coprococcus catus</i>	<i>Ruminococcus obeum</i>	-
SPC00018	SPC10197	<i>Dorea formicigenerans</i>	<i>Ruminococcus obeum</i>	++++
SPC00057	SPC10197	<i>Dorea longicatena</i>	<i>Ruminococcus obeum</i>	+
SPC00008	SPC10197	<i>Enterococcus faecalis</i>	<i>Ruminococcus obeum</i>	+++
SPC10001	SPC10197	<i>Erysipelotrichaceae_bacterium</i>	<i>Ruminococcus obeum</i>	++++
SPC00001	SPC10197	<i>Escherichia coli</i>	<i>Ruminococcus obeum</i>	+
SPC10110	SPC10197	<i>Escherichia coli</i>	<i>Ruminococcus obeum</i>	+
SPC00022	SPC10197	<i>Eubacterium eligens</i>	<i>Ruminococcus obeum</i>	-
SPC00054	SPC10197	<i>Faecalibacterium prausnitzii</i>	<i>Ruminococcus obeum</i>	++++
SPC00056	SPC10197	<i>Odoribacter_splanchnicus</i>	<i>Ruminococcus obeum</i>	++++
SPC10048	SPC10197	<i>Parabacteroides merdae</i>	<i>Ruminococcus obeum</i>	++++
SPC00061	SPC10197	<i>Roseburia intestinalis</i>	<i>Ruminococcus obeum</i>	++++
SPC10197	SPC10197	<i>Ruminococcus obeum</i>	<i>Ruminococcus obeum</i>	++++
SPC00015	SPC10197	<i>Streptococcus thermophilus</i>	<i>Ruminococcus torques</i>	++++
SPC10211	SPC10233	<i>Bacteroides caccae</i>	<i>Ruminococcus torques</i>	++++
SPC10213	SPC10233	<i>Bacteroides eggerthii</i>	<i>Ruminococcus torques</i>	++++
SPC10030	SPC10233	<i>Bacteroides ovatus</i>	<i>Ruminococcus torques</i>	++++
SPC00006	SPC10233	<i>Bacteroides_sp_1_1_6</i>	<i>Ruminococcus torques</i>	++++
SPC00007	SPC10233	<i>Bacteroides_sp_3_1_23</i>	<i>Ruminococcus torques</i>	++
SPC10019	SPC10233	<i>Bacteroides_sp_D20</i>	<i>Ruminococcus torques</i>	++++
SPC00005	SPC10233	<i>Bacteroides vulgatus</i>	<i>Ruminococcus torques</i>	++++
SPC10081	SPC10233	<i>Bacteroides vulgatus</i>	<i>Ruminococcus torques</i>	++++
SPC00021	SPC10233	<i>Blautia producta</i>	<i>Ruminococcus torques</i>	+
SPC00026	SPC10233	<i>Clostridium nexile</i>	<i>Ruminococcus torques</i>	++++
SPC00027	SPC10233	<i>Clostridium_sp_HGF2</i>	<i>Ruminococcus torques</i>	++++
SPC10097	SPC10233	<i>Collinsella aerofaciens</i>	<i>Ruminococcus torques</i>	++++
SPC00009	SPC10233	<i>Coprobacillus_sp_D7</i>	<i>Ruminococcus torques</i>	+
SPC00080	SPC10233	<i>Coprococcus catus</i>	<i>Ruminococcus torques</i>	+

TABLE 5

SPC00018	SPC10233	Dorea, formicigenerans	Ruminococcus, torques	+++
SPC00057	SPC10233	Dorea, longicatena	Ruminococcus, torques	+++
SPC00008	SPC10233	Enterococcus, faecalis	Ruminococcus, torques	+
SPC10001	SPC10233	Erysipelotrichaceae, bacterium	Ruminococcus, torques	+++
SPC00001	SPC10233	Escherichia, coli	Ruminococcus, torques	+++
SPC10110	SPC10233	Escherichia, coli	Ruminococcus, torques	++
SPC00022	SPC10233	Eubacterium, eligens	Ruminococcus, torques	
SPC00054	SPC10233	Faecalibacterium, prausnitzii	Ruminococcus, torques	
SPC00056	SPC10233	Odoribacter, splanchnicus	Ruminococcus, torques	+
SPC10048	SPC10233	Parabacteroides, merdae	Ruminococcus, torques	+
SPC01061	SPC10233	Roseburia, intestinalis	Ruminococcus, torques	+++
SPC10197	SPC10233	Ruminococcus, obscurum	Ruminococcus, torques	+++
SPC10233	SPC10233	Ruminococcus, torques	Ruminococcus, torques	+
SPC00015	SPC10233	Streptococcus, thermophilus	Ruminococcus, torques	+
SPC00006	SPC00015	Bacteroides, sp. 1, 1, 6	Streptococcus, thermophilus	+
SPC00007	SPC00015	Bacteroides, sp. 3, 1, 23	Streptococcus, thermophilus	+
SPC00005	SPC00015	Bacteroides, vulgatus	Streptococcus, thermophilus	+
SPC00009	SPC00015	Coprobacillus, sp. 07	Streptococcus, thermophilus	+
SPC00008	SPC00015	Enterococcus, faecalis	Streptococcus, thermophilus	+
SPC00001	SPC00015	Escherichia, coli	Streptococcus, thermophilus	+
SPC00015	SPC00015	Streptococcus, thermophilus	Streptococcus, thermophilus	+

TABLE 6

SPC1	SPC2	SPC3	OTU1	OTU2	OTU3	Results
SPC10325	SPC10415	SPC10567	Clostridium_bolteae	Blautia producta	Eubacterium_rectale	++++
SPC10325	SPC10355	SPC10415	Clostridium_bolteae	Clostridium_symbiosum	Blautia producta	++++
SPC10325	SPC10355	SPC10567	Clostridium_bolteae	Clostridium_symbiosum	Eubacterium_rectale	-
SPC10325	SPC10355	SPC10386	Clostridium_bolteae	Clostridium_symbiosum	Faecalibacterium_prausnitzii	-
SPC10325	SPC10355	SPC10390	Clostridium_bolteae	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	++++
SPC10325	SPC10386	SPC10415	Clostridium_bolteae	Faecalibacterium_prausnitzii	Blautia producta	++++
SPC10325	SPC10386	SPC10567	Clostridium_bolteae	Faecalibacterium_prausnitzii	Eubacterium_rectale	+
SPC10325	SPC10390	SPC10415	Clostridium_bolteae	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	++++
SPC10325	SPC10390	SPC10567	Clostridium_bolteae	Lachnospiraceae_bacterium_5_1_57FAA	Blautia producta	+
SPC10355	SPC10415	SPC10567	Clostridium_symbiosum	Blautia producta	Eubacterium_rectale	++++
SPC10355	SPC10386	SPC10415	Clostridium_symbiosum	Faecalibacterium_prausnitzii	Eubacterium_rectale	++++
SPC10355	SPC10386	SPC10567	Clostridium_symbiosum	Faecalibacterium_prausnitzii	Eubacterium_rectale	+
SPC10355	SPC10390	SPC10386	Clostridium_symbiosum	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	++++
SPC10355	SPC10390	SPC10567	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	Blautia producta	++++
SPC10355	SPC10390	SPC10567	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	Eubacterium_rectale	++++
SPC10097	SPC10415	SPC10567	Collinsella_aerofaciens	Blautia producta	Eubacterium_rectale	++++
SPC10097	SPC10325	SPC10415	Collinsella_aerofaciens	Clostridium_bolteae	Blautia producta	++++
SPC10097	SPC10325	SPC10355	Collinsella_aerofaciens	Clostridium_bolteae	Clostridium_symbiosum	++++
SPC10097	SPC10325	SPC10567	Collinsella_aerofaciens	Clostridium_bolteae	Eubacterium_rectale	++++
SPC10097	SPC10325	SPC10386	Collinsella_aerofaciens	Clostridium_bolteae	Faecalibacterium_prausnitzii	++++
SPC10097	SPC10325	SPC10390	Collinsella_aerofaciens	Clostridium_bolteae	Lachnospiraceae_bacterium_5_1_57FAA	++++
SPC10097	SPC10355	SPC10415	Collinsella_aerofaciens	Clostridium_symbiosum	Blautia producta	++++
SPC10097	SPC10355	SPC10567	Collinsella_aerofaciens	Clostridium_symbiosum	Eubacterium_rectale	++++
SPC10097	SPC10355	SPC10386	Collinsella_aerofaciens	Clostridium_symbiosum	Faecalibacterium_prausnitzii	+
SPC10097	SPC10355	SPC10390	Collinsella_aerofaciens	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	+
SPC10097	SPC10304	SPC10415	Collinsella_aerofaciens	Coprococcus_comes	Blautia producta	++++
SPC10097	SPC10304	SPC10325	Collinsella_aerofaciens	Coprococcus_comes	Clostridium_bolteae	++++

TABLE 6

SPC10097	SPC10304	SPC10355	Collinsella_aerofaciens	Coproccoccus_comes	Clostridium_symbiosum	+++
SPC10097	SPC10304	SPC10567	Collinsella_aerofaciens	Coproccoccus_comes	Eubacterium_rectale	+++
SPC10097	SPC10304	SPC10386	Collinsella_aerofaciens	Coproccoccus_comes	Faecalibacterium_prausnitzii	+++
SPC10097	SPC10304	SPC10390	Collinsella_aerofaciens	Coproccoccus_comes	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10097	SPC10386	SPC10415	Collinsella_aerofaciens	Faecalibacterium_prausnitzii	Blautia_producta	+++
SPC10097	SPC10386	SPC10567	Collinsella_aerofaciens	Faecalibacterium_prausnitzii	Eubacterium_rectale	+++
SPC10097	SPC10386	SPC10390	Collinsella_aerofaciens	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10097	SPC10390	SPC10415	Collinsella_aerofaciens	Lachnospiraceae_bacterium_5_1_57FAA	Blautia_producta	+++
SPC10097	SPC10390	SPC10567	Collinsella_aerofaciens	Lachnospiraceae_bacterium_5_1_57FAA	Eubacterium_rectale	+++
SPC10304	SPC10415	SPC10567	Coproccoccus_comes	Blautia_producta	Eubacterium_rectale	+++
SPC10304	SPC10325	SPC10415	Coproccoccus_comes	Clostridium_botteae	Blautia_producta	+++
SPC10304	SPC10325	SPC10355	Coproccoccus_comes	Clostridium_botteae	Clostridium_symbiosum	---
SPC10304	SPC10325	SPC10567	Coproccoccus_comes	Clostridium_botteae	Eubacterium_rectale	---
SPC10304	SPC10325	SPC10386	Coproccoccus_comes	Clostridium_botteae	Faecalibacterium_prausnitzii	+++
SPC10304	SPC10325	SPC10390	Coproccoccus_comes	Clostridium_botteae	Lachnospiraceae_bacterium_5_1_57FAA	+++
SPC10304	SPC10355	SPC10415	Coproccoccus_comes	Clostridium_symbiosum	Blautia_producta	+++
SPC10304	SPC10355	SPC10567	Coproccoccus_comes	Clostridium_symbiosum	Eubacterium_rectale	---
SPC10304	SPC10355	SPC10386	Coproccoccus_comes	Clostridium_symbiosum	Faecalibacterium_prausnitzii	---
SPC10304	SPC10355	SPC10390	Coproccoccus_comes	Clostridium_symbiosum	Lachnospiraceae_bacterium_5_1_57FAA	---
SPC10304	SPC10386	SPC10415	Coproccoccus_comes	Faecalibacterium_prausnitzii	Blautia_producta	+++
SPC10304	SPC10386	SPC10567	Coproccoccus_comes	Faecalibacterium_prausnitzii	Eubacterium_rectale	-
SPC10304	SPC10386	SPC10390	Coproccoccus_comes	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	-
SPC10304	SPC10390	SPC10415	Coproccoccus_comes	Lachnospiraceae_bacterium_5_1_57FAA	Blautia_producta	+++
SPC10304	SPC10390	SPC10567	Coproccoccus_comes	Lachnospiraceae_bacterium_5_1_57FAA	Eubacterium_rectale	+++
SPC10386	SPC10415	SPC10567	Faecalibacterium_prausnitzii	Blautia_producta	Eubacterium_rectale	+++
SPC10386	SPC10390	SPC10415	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	Blautia_producta	+++
SPC10386	SPC10390	SPC10567	Faecalibacterium_prausnitzii	Lachnospiraceae_bacterium_5_1_57FAA	Eubacterium_rectale	+++
SPC10390	SPC10415	SPC10567	Lachnospiraceae_bacterium_5_1_57FAA	Blautia_producta	Eubacterium_rectale	+++

TABLE 7

Species	Domain	Phylum	Class	Order	Family	Genus	NIAID Category A,B,C Pathogen
<i>Bacillus anthracis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	Category-A
<i>Bifidobacterium dentium</i>	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	<i>Bifidobacterium</i>	No
<i>Bordetella bronchiseptica</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Bordetella holmesii</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Bordetella parapertussis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Bordetella pertussis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Borrelia afzelii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia burgdorferi</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia crocidurae</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia duttonii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia garinii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia hermslii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia hispanica</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia persica</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia recurrentis</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia</i> sp. NE49	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia spielmanii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia turicatae</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia valaisiana</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Brucella abortus</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella canis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella ceti</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella melitensis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella microti</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella ovis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella</i> sp. 83/13	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella</i> sp. BO1	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella suis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Burkholderia ambifaria</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia cenocepacia</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia cepacia</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia mallei</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	Category-B
<i>Burkholderia multivorans</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia oklahomensis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia pseudomallei</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	Category-B
<i>Burkholderia rhizoxinica</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia</i> sp. 383	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia xenovovans</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderiales bacterium 1_1_47</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae		No
<i>Campylobacter coli</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter concisus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter curvus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter fetus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter gracilis</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter hominis</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter jejuni</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	Category-B
<i>Campylobacter lari</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter rectus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter showae</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter</i> sp. FOBR14	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter</i> sp. FOBR15	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter</i> sp. oral clone BB120	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No

TABLE 7

<i>Campylobacter sputorum</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteriaceae	Campylobacter	No
<i>Campylobacter upsaliensis</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Campylobacteriaceae	Campylobacter	No
<i>Chlamydia muridarum</i>	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
<i>Chlamydia psittaci</i>	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	Category-B
<i>Chlamydia trachomatis</i>	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
<i>Chlamydophila pecorum</i>	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
<i>Chlamydophila pneumoniae</i>	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
<i>Chlamydophila psittaci</i>	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
<i>Clostridium botulinum</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	Category-A
<i>Clostridium difficile</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae		No
<i>Clostridium perfringens</i>	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	Category-B
<i>Corynebacterium amycolatum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
<i>Corynebacterium diphtheriae</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
<i>Corynebacterium jeikeium</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
<i>Corynebacterium striatum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
<i>Corynebacterium urealyticum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
<i>Corynebacterium xerosis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
<i>Coxiella burnetii</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Coxiellaceae	Coxiella	Category-B
<i>Ehrlichia chaffeensis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Ehrlichia	No
<i>Escherichia coli</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia	Category-B
<i>Francisella tularensis</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Francisellaceae	Francisella	Category-A
<i>Haemophilus ducreyi</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	No
<i>Haemophilus influenzae</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	No
<i>Helicobacter pylori</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacterales	Helicobacteriaceae	Helicobacter	No
<i>Klebsiella oxytoca</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Klebsiella	No
<i>Klebsiella pneumoniae</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Klebsiella	No
<i>Legionella hackeliae</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella longbeachae</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella pneumophila</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella</i> sp. D3923	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella</i> sp. D4088	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella</i> sp. H63	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella</i> sp. NML 93L054	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Legionella steelsi</i>	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
<i>Leptospira borgpetersenii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
<i>Leptospira broomii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
<i>Leptospira interrogans</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
<i>Leptospira licerasiae</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
<i>Listeria grayi</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria	No
<i>Listeria monocytogenes</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria	Category-B
<i>Listeria welshimeri</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria	No
<i>Mycobacterium abscessus</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium africanum</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium aliiensis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium avium</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium chelonae</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium colombiense</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium elephantis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium goodii</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium intracellulare</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium kansasii</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium lacus</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium leprae</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
<i>Mycobacterium lepromatosis</i>	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No

TABLE 7

Mycobacterium mageritense	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium mantonii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium marinum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium microti	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium neoaurum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium parascrofulaceum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium paratenae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium phlei	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium seoulense	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium smegmatis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium tuberculosis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	Category-C
Mycobacterium ulcerans	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium vulneris	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Neisseria gonorrhoeae	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria	No
Neisseria meningitidis	Bacteria	Proteobacteria	Betaproteobacteria	Neisseriales	Neisseriaceae	Neisseria	No
Orientia tsutsugamushi	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Orientia	No
Rickettsia akari	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	No
Rickettsia conorii	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	No
Rickettsia prowazekii	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	Category-B
Rickettsia rickettsii	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	No
Rickettsia slovaca	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	No
Rickettsia typhi	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Rickettsiaceae	Rickettsia	No
Salmonella bongori	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella	Category-B
Salmonella enterica	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella	Category-B
Salmonella typhimurium	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Salmonella	Category-B
Shigella boydii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Shigella	Category-B
Shigella dysenteriae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Shigella	Category-B
Shigella flexneri	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Shigella	Category-B
Shigella sonnei	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Shigella	Category-B
Shigella sp. D9	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Shigella	Category-B
Staphylococcus aureus	Bacteria	Firmicutes	Bacilli	Bacillales	Staphylococcaceae	Staphylococcus	Category-B
Streptococcus pyogenes	Bacteria	Firmicutes	Bacilli	Lactobacillales	Streptococcaceae	Streptococcus	No
Treponema denticola	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema lecithinolyticum	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema pallidum	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema parvum	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema putidum	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema refringens	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema socranskii	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Treponema vincentii	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	Treponema	No
Vibrio cholerae	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Vibrio fluvialis	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Vibrio furnissii	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Vibrio mimicus	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Vibrio parahaemolyticus	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Vibrio sp. RC341	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Vibrio vulnificus	Bacteria	Proteobacteria	Gammaproteobacteria	Vibrionales	Vibrionaceae	Vibrio	Category-B
Yersinia aldovae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia aleksiciiae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia bercovieri	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia enterocolitica	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	Category-B
Yersinia frederiksenii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia intermedia	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia kristensenii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No

TABLE 7

Yersinia mollaretii	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia pestis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	Category-A
Yersinia pseudotuberculosis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia rohdei	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Multi-Drug Resistant bacteria	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C
Carbapenem-Resistant Enterobacteriaceae (CRE)	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C
Extended Spectrum Beta-Lactam Resistant Enterococci (ESBL)	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C
Vancomycin-Resistant Enterococci (VRE)	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C

TABLE 7

Species	Domain	Phylum	Class	Order	Family	Genus	NIHID Category A,B,C
<i>Bacillus anthracis</i>	Bacteria	Firmicutes	Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	Pathogen Category-A
<i>Bifidobacterium dentium</i>	Bacteria	Actinobacteria	Actinobacteria	Bifidobacteriales	Bifidobacteriaceae	<i>Bifidobacterium</i>	No
<i>Bordetella bronchiseptica</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Bordetella holmesii</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Bordetella parapertussis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Bordetella pertussis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Alcaligenaceae	<i>Bordetella</i>	No
<i>Borrelia afzelii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia burgdorferi</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia crocidurae</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia duttonii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia garinii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia hermslii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia hispanica</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia persica</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia recurrentis</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia</i> sp. NE49	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia spielmanii</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia turicatae</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Borrelia valaisiana</i>	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Spirochaetaceae	<i>Borrelia</i>	No
<i>Brucella abortus</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella canis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella ceti</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella melitensis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella microti</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella ovis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella</i> sp. 83/13	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella</i> sp. 801	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Brucella suis</i>	Bacteria	Proteobacteria	Alphaproteobacteria	Rhizobiales	Brucellaceae	<i>Brucella</i>	Category-B
<i>Burkholderia ambifaria</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia cenocepacia</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia cepacia</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia mallei</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	Category-B
<i>Burkholderia multivorans</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia oklahomensis</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia pseudomallei</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	Category-B
<i>Burkholderia rhizoxinica</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia</i> sp. 383	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderia xenovorans</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Burkholderiales bacterium 1_1_47</i>	Bacteria	Proteobacteria	Betaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia</i>	No
<i>Campylobacter coli</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter concisus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter curvus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter fetus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter gracilis</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter hominis</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter jejuni</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	Category-B
<i>Campylobacter lari</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter rectus</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter showae</i>	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter</i> sp. FOBR14	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter</i> sp. FOBR15	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No
<i>Campylobacter</i> sp. oral clone B8120	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteraceae	<i>Campylobacter</i>	No

TABLE 7

Campylobacter sputorum	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteriaceae	Campylobacter	No
Campylobacter upsaliensis	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Campylobacteriaceae	Campylobacter	No
Chlamydia muridarum	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
Chlamydia psittaci	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	Category-B
Chlamydia trachomatis	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
Chlamydophila pecorum	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
Chlamydophila pneumoniae	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
Chlamydophila psittaci	Bacteria	Chlamydiae	Chlamydia	Chlamydiales	Chlamydiaceae	Chlamydia	No
Clostridium botulinum	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	Category-A
Clostridium difficile	Bacteria	Firmicutes	Clostridia	Clostridiales	Peptostreptococcaceae		No
Clostridium perfringens	Bacteria	Firmicutes	Clostridia	Clostridiales	Clostridiaceae	Clostridium	Category-B
Corynebacterium amycolatum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
Corynebacterium diphtheriae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
Corynebacterium jeikeium	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
Corynebacterium striatum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
Corynebacterium urealyticum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
Corynebacterium xerosis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Corynebacteriaceae	Corynebacterium	No
Coxiella burnetii	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Coxiellaceae	Coxiella	Category-B
Ehrlichia chaffeensis	Bacteria	Proteobacteria	Alphaproteobacteria	Rickettsiales	Anaplasmataceae	Ehrlichia	No
Escherichia coli	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Escherichia	Category-B
Francisella tularensis	Bacteria	Proteobacteria	Gammaproteobacteria	Thiotrichales	Francisellaceae	Francisella	Category-A
Haemophilus ducreyi	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	No
Haemophilus influenzae	Bacteria	Proteobacteria	Gammaproteobacteria	Pasteurellales	Pasteurellaceae	Haemophilus	No
Helicobacter pylori	Bacteria	Proteobacteria	Epsilonproteobacteria	Campylobacteriales	Helicobacteriaceae	Helicobacter	No
Klebsiella oxytoca	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Klebsiella	No
Klebsiella pneumoniae	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Klebsiella	No
Legionella hackeliae	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella longbeachae	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella pneumophila	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella sp. D3923	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella sp. D4088	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella sp. H63	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella sp. NML 93L054	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Legionella steeler	Bacteria	Proteobacteria	Gammaproteobacteria	Legionellales	Legionellaceae	Legionella	No
Leptospira borgpetersenii	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
Leptospira broomii	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
Leptospira interrogans	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
Leptospira licerasiae	Bacteria	Spirochaetes	Spirochaetia	Spirochaetales	Leptospiraceae	Leptospira	No
Listeria grayi	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria	No
Listeria monocytogenes	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria	Category-B
Listeria welshimeri	Bacteria	Firmicutes	Bacilli	Bacillales	Listeriaceae	Listeria	No
Mycobacterium abscessus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium africanum	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium alsiensis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium avium	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium chelonae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium colombiense	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium elephantis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium goodii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium intracellulare	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium kansasii	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium lacus	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium leprae	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No
Mycobacterium lepromatosis	Bacteria	Actinobacteria	Actinobacteria	Actinomycetales	Mycobacteriaceae	Mycobacterium	No

216

[illegible]

TABLE 7

Yersinia mollahetti	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia pestis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	Category-A
Yersinia pseudotuberculosis	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Yersinia rohdei	Bacteria	Proteobacteria	Gammaproteobacteria	Enterobacteriales	Enterobacteriaceae	Yersinia	No
Multi-Drug Resistant bacteria	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C
Carbapenem-Resistant Enterobacteriaceae (CRE)	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C
Extended Spectrum Beta-Lactam Resistant Enterococci (ESBE)	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C
Vancomycin-Resistant Enterococci (VRE)	Bacteria	multiple	multiple	multiple	multiple	multiple	Category-C

TABLE 9

List

Abdominal cavity inflammation
 Absidia infection
 Acinetobacter baumannii infection
 Acinetobacter infection
 Acinetobacter lwoffii infection
 Acne
 Actinomyces israelii infection
 Adenovirus infection
 Adult varicella zoster virus infection
 Aging
 Alcoholism (and effects)
 Allergic conjunctivitis
 Allergic rhinitis
 Allergy
 ALS
 Alzheimers disease
 Amoeba infection
 Anal cancer
 Antibiotic treatment
 Antibiotic associated diarrhea
 Arteriosclerosis
 Arthritis
 Aspergillus fumigatus infection
 Aspergillus infection
 Asthma
 Atherosclerosis
 Atopic dermatitis
 Atopy / Allergic Sensitivity
 Autism
 Autoimmune disease
 Bacillus anthracis infection
 Bacillus infection
 Bacterial endocarditis
 Bacterial eye infection
 Bacterial infection
 Bacterial meningitis
 Bacterial pneumonia
 Bacterial respiratory tract infection
 Bacterial skin infection
 Bacterial susceptibility
 Bacterial urinary tract infection
 Bacterial vaginosis
 Bacteroides caccae infection
 Bacteroides fragilis infection
 Bacteroides infection
 Bacteroides thetaiotaomicron infection
 Bacteroides uniformis infection
 Bacteroides vulgatus infection
 Bartonella bacilliformis infection
 Bartonella infection
 Bifidobacterium infection
 Biliary cancer
 Biliary cirrhosis
 Biliary tract disease
 Biliary tract infection
 Biliary tumor
 BK virus infection
 Blastomyces infection
 Bone and joint infection
 Bone infection
 Bordetella pertussis infection
 Borrelia burgdorferi infection
 Borrelia recurrentis infection
 Brucella infection
 Burkholderia infection
 Cachexia
 Campylobacter fetus infection
 Campylobacter infection
 Campylobacter jejuni infection
 Cancer
 Candida albicans infection
 Candida infection
 Candida krusei infection
 Celiac Disease
 Cervix infection
 Chemotherapy-induced diarrhea
 Chlamydia infection
 Chlamydia pneumoniae infection
 Chlamydia trachomatis infection
 Chlamydiae infection
 Chronic fatigue syndrome
 Chronic infection

TABLE 9

Chronic inflammatory demyelinating polyneuropathy
 Chronic Polio Shedders
 Circadian rhythm sleep disorder
 Cirrhosis
 Citrobacter infection
 Cladophialophora infection
 Clostridiaceae infection
 Clostridium botulinum infection
 Clostridium difficile infection
 Clostridium infection
 Clostridium tetani infection
 Coccidioides infection
 Colitis
 Colon cancer
 Colorectal cancer
 Common cold
 Compensated liver cirrhosis
 Complicated skin and skin structure infection
 Complicated urinary tract infection
 Constipation
 Constipation predominant irritable bowel syndrome
 Corynebacterium diphtheriae infection
 Corynebacterium infection
 Coxiella infection
 CRE infection
 Crohn's disease
 Cryptococcus infection
 Cryptococcus neoformans infection
 Cryptosporidium infection
 Cutaneous lupus erythematosus
 Cystic fibrosis
 Cystitis
 Cytomegalovirus infection
 Dementia
 Dengue virus infection
 Depression
 Dermatitis
 Diabetes mellitus
 Diabetic complication
 Diabetic foot ulcer
 Diarrhea
 Diarrhea predominant irritable bowel syndrome
 Discoid lupus erythematosus
 Diverticulitis
 DNA virus infection
 Duodenal ulcer
 Ebola virus infection
 Entamoeba histolytica infection
 Enterobacter aerogenes infection
 Enterobacter cloacae infection
 Enterobacter infection
 Enterobacteriaceae infection
 Enterococcus faecalis infection
 Enterococcus faecium infection
 Enterococcus infection
 Enterocolitis
 Enterovirus 71 infection
 Epidermophyton infection
 Epstein Barr virus infection
 ESBL (Extended Spectrum Beta Lactamase) Producing Bacterial Infection
 Escherichia coli infection
 Esophageal cancer
 Exophiala infection
 Familial cold autoinflammatory syndrome
 Fasciola hepatica infection
 Female genital tract infection
 Female genital tract tumor
 Female infertility
 Fibrosis
 Flavivirus infection
 Food Allergy
 Francisella tularensis infection
 Functional bowel disorder
 Fungal infection
 Fungal respiratory tract infection
 Fungal urinary tract infection
 Fusarium infection
 Fusobacterium infection
 Gastric ulcers
 Gastrointestinal infection
 Gastrointestinal pain
 Gastrointestinal ulcer
 Genital tract infection
 Genitourinary disease

TABLE 9

Genitourinary tract tumor
 Gestational diabetes
 Giardia lamblia infection
 Gingivitis
 Gram negative bacterium infection
 Gram positive bacterium infection
 Haemophilus aegyptus infection
 Haemophilus ducreyi infection
 Haemophilus infection
 Haemophilus influenzae infection
 Haemophilus parainfluenzae infection
 Hantavirus infection
 Helicobacter pylori infection
 Helminth infection
 Hepatitis A virus infection
 Hepatitis B virus infection
 Hepatitis C virus infection
 Hepatitis D virus infection
 Hepatitis E virus infection
 Hepatitis virus infection
 Herpes simplex virus infection
 Herpesvirus infection
 Histoplasma infection
 HIV infection
 HIV-1 infection
 HIV-2 infection
 HSV-1 infection
 HSV-2 infection
 Human T cell leukemia virus 1 infection
 Hypercholesterolemia
 Hyperoxaluria
 Hypertension
 Infectious arthritis
 Infectious disease
 Infectious endocarditis
 Infertility
 Inflammatory bowel disease
 Inflammatory disease
 Influenza virus A infection
 Influenza virus B infection
 Influenza virus infection
 Insomnia
 Insulin dependent diabetes
 Intestine infection
 Irritable bowel syndrome
 Japanese encephalitis virus infection
 Joint infection
 Juvenile rheumatoid arthritis
 Klebsiella granulomatis infection
 Klebsiella infection
 Klebsiella pneumoniae infection
 Legionella infection
 Legionella pneumophila infection
 Leishmania braziliensis infection
 Leishmania donovani infection
 Leishmania infection
 Leishmania tropica infection
 Leptospiraceae infection
 Listeria monocytogenes infection
 Listeriosis
 Liver cirrhosis
 Liver fibrosis
 Lower respiratory tract infection
 Lung infection
 Lung inflammation
 Lupus erythematosus panniculitis
 Lupus nephritis
 Lyme disease
 Male infertility
 Marburg virus infection
 Measles virus infection
 Metabolic disorder
 Metabolic Syndrome
 Metastatic colon cancer
 Metastatic colorectal cancer
 Metastatic esophageal cancer
 Metastatic gastrointestinal cancer
 Metastatic stomach cancer
 Micrococcaceae infection
 Micrococcus infection
 Microsporidial infection
 Microsporium infection
 Mollusum contagiosum infection
 Monkeypox virus infection

TABLE 9

Moraxella catarrhalis infection
 Moraxella infection
 Morganella infection
 Morganella morganii infection
 MRSA infection
 Mucor infection
 Multidrug resistant infection
 Multiple sclerosis
 Mumps virus infection
 Musculoskeletal system inflammation
 Mycobacterium infection
 Mycobacterium leprae infection
 Mycobacterium tuberculosis infection
 Mycoplasma infection
 Mycoplasma pneumoniae infection
 Necrotizing enterocolitis
 Necrotizing Pancreatitis
 Neisseria gonorrhoeae infection
 Neisseria infection
 Neisseria meningitidis infection
 Nematode infection
 Non alcoholic fatty liver disease
 Non-alcoholic steatohepatitis
 Non-insulin dependent diabetes
 Obesity
 Ocular infection
 Ocular inflammation
 Orbital inflammatory disease
 Osteoarthritis
 Otorhinolaryngological infection
 Pain
 Papillomavirus infection
 Parasitic infection
 Parkinsons disease
 Pediatric varicella zoster virus infection
 Pelvic inflammatory disease
 Peptostreptococcus infection
 Perennial allergic rhinitis
 Periarthritis
 Pink eye infection
 Plasmodium falciparum infection
 Plasmodium infection
 Plasmodium malariae infection
 Plasmodium vivax infection
 Pneumocystis carinii infection
 Poliovirus infection
 Polyomavirus infection
 Post-surgical bacterial leakage
 Pouchitis
 Prevotella infection
 Primary biliary cirrhosis
 Primary sclerosing cholangitis
 Propionibacterium acnes infection
 Propionibacterium infection
 Prostate cancer
 Proteus infection
 Proteus mirabilis infection
 Protozoal infection
 Providencia infection
 Pseudomonas aeruginosa infection
 Pseudomonas infection
 Psoriasis
 Psoriatic arthritis
 Pulmonary fibrosis
 Rabies virus infection
 Rectal cancer
 Respiratory syncytial virus infection
 Respiratory tract infection
 Respiratory tract inflammation
 Rheumatoid arthritis
 Rhinitis
 Rhizomucor infection
 Rhizopus infection
 Rickettsia infection
 Ross River virus infection
 Rotavirus infection
 Rubella virus infection
 Salmonella infection
 Salmonella typhi infection
 Sarcopenia
 SARS coronavirus infection
 Scabies infection
 Scedosporium infection
 Scleroderma

TABLE 9

Seasonal allergic rhinitis
 Serratia infection
 Serratia marcescens infection
 Shigella boydii infection
 Shigella dysenteriae infection
 Shigella flexneri infection
 Shigella infection
 Shigella sonnei infection
 Short bowel syndrome
 Skin allergy
 Skin cancer
 Skin infection
 Skin inflammatory disease
 Sleep disorder
 Spondylarthritis
 Staphylococcus aureus infection
 Staphylococcus epidermidis infection
 Staphylococcus infection
 Staphylococcus saprophyticus infection
 Stenotrophomonas maltophilia infection
 Stomach cancer
 Stomach infection
 Stomach ulcer
 Streptococcus agalactiae infection
 Streptococcus constellatus infection
 Streptococcus infection
 Streptococcus intermedius infection
 Streptococcus mitis infection
 Streptococcus oralis infection
 Streptococcus pneumoniae infection
 Streptococcus pyogenes infection
 Systemic lupus erythematosus
 Traveler's diarrhea
 Trench mouth
 Treponema infection
 Treponema pallidum infection
 Trichomonas infection
 Trichophyton infection
 Trypanosoma brucei infection
 Trypanosoma cruzi infection
 Type 1 Diabetes
 Type 2 Diabetes
 Ulcerative colitis
 Upper respiratory tract infection
 Ureaplasma urealyticum infection
 Urinary tract disease
 Urinary tract infection
 Urinary tract tumor
 Urogenital tract infection
 Uterus infection
 Vaccinia virus infection
 Vaginal infection
 Varicella zoster virus infection
 Variola virus infection
 Vibrio cholerae infection
 Viral eye infection
 Viral infection
 Viral respiratory tract infection
 Viridans group Streptococcus infection
 Vancomycin-Resistant Enterococcus infection
 Wasting Syndrome
 Weight loss
 West Nile virus infection
 Whipple's disease
 Xenobiotic metabolism
 Yellow fever virus infection
 Yersinia pestis infection
 Flatulence
 Gastrointestinal Disorder
 General Inflammation

WHAT IS CLAIMED IS:

1. A composition comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium capable of forming a spore and a second type of isolated bacterium capable of forming a spore, wherein the first type and the second type are not identical, and wherein at least one of the first type and the second type are capable of decreasing and/or inhibiting the growth and/or colonization of at least one type of pathogenic bacteria.
2. The composition of claim 1, wherein the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria.
3. The composition of claim 1, wherein the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria and at least 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 of the isolated bacteria are capable of forming spores.
4. The composition of claim 1, wherein the bacterial composition comprises at least about 5 types of isolated bacteria and at least 2 of the isolated bacteria are capable of forming spores.
5. The composition of claim 1, wherein the bacterial composition comprises: i) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria capable of forming spores, ii) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria not known to be capable of forming spores, or iii) any combination of i) and ii).
6. The composition of claim 1, wherein the first type and the second type are present in the composition in approximately equal concentrations.
7. The composition of claim 1, wherein the first type and the second type are present in the composition in not substantially equal concentrations.
8. The composition of claim 1, wherein the first type is present in the composition in at least about 150% the concentration of the second type, or wherein the second type is present in the composition in at least about 150% the concentration of the first type.
9. The composition of claim 1, wherein the composition consists essentially of: i) between two and about twenty types of isolated bacteria, wherein at least two types of isolated bacteria are independently capable of spore formation; ii) between two and about twenty types of isolated bacteria, wherein at least two types of isolated

bacteria not known to be capable of spore formation, or iii) any combination of i) and ii).

10. The composition of claim 1, wherein the first type of isolated bacterium and the second type of isolated bacterium are selected from Table 1.

11. The composition of claim 1, wherein the first type of isolated bacterium and the second type of isolated bacterium comprise an operational taxonomic unit (OTU) distinction.

12. The composition of claim 11, wherein the OTU distinction comprises 16S rRNA sequence similarity below about 95% identity.

13. The composition of claim 1, wherein the first type of isolated bacterium and the second type of isolated bacterium independently comprise bacteria that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.

14. The composition of claim 1, wherein a combination of the first type and the second type are: i) cytotoxic, ii) cytostatic, iii) capable of decreasing the growth of the pathogenic bacterium, iv) capable of inhibiting the growth of the pathogenic bacterium, v) capable of decreasing the colonization of the pathogenic bacterium, vi) capable of inhibiting the colonization of the pathogenic bacterium, or vii) any combination of i)-vi).

15. The composition of claim 14, wherein the combination is capable of inhibiting proliferation of the pathogenic bacteria present at a concentration at least equal to the concentration of the combination of the first type and the second type.

16. The composition of claim 14, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type.

17. The composition of claim 14, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type.

18. The composition of claim 14, wherein the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*,

Burkholderia, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant *Enterococci* (VRE).

19. The composition of claim 14, wherein the first type and the second type synergistically interact.

20. The composition of claim 14, wherein the first type and the second type synergistically interact to inhibit the pathogenic bacterium.

21. A composition comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein only one of the first type and the second type are capable of forming a spore, and wherein at least one of the first type and the second type are capable of decreasing the growth and/or colonization of at least one type of pathogenic bacteria.

22. A composition comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein the first type and the second type are not spores or known to be capable of forming a spore, and wherein at least one of the first type and the second type are capable of decreasing the growth and/or colonization of at least one type of pathogenic bacteria.

23. The composition of any one of claims 1, 21 and 22, wherein at least one of the first type and the second type are capable of reducing the growth rate of at least one type of pathogenic bacteria.

24. The composition of any one of claims 1, 21 and 22, wherein at least one of the first type and the second type are cytotoxic to at least one type of pathogenic bacteria.

25. The composition of any one of claims 1, 21 and 22, wherein at least one of the first type and the second type are cytostatic to at least one type of pathogenic bacteria.

26. The composition of any one of claims 1, 21 and 22, wherein the first type and the second type are selected from Table 1.

27. The composition of any one of claims 1, 21 and 22, wherein the first type and the second type comprise different species.

28. The composition of any one of claims 1, 21 and 22, wherein the first type and the second type comprise different genera.

29. The composition of any one of claims 1, 21 and 22, wherein the first type and the second type comprise different families.

30. The composition of any one of claims 1, 21 and 22, wherein the first type and the second type comprise different orders.

31. A composition comprising an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein:

- i) the first type and the second type are independently capable of forming a spore;
- ii) only one of the first type and the second type are capable of forming a spore or
- iii) neither the first type nor the second type are capable of forming a spore,

wherein the first type and the second type are not identical, wherein the first type and the second type are capable of functionally populating the gastrointestinal tract of a human subject to whom the composition is administered.

32. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises preventing a dysbiosis of the gastrointestinal tract.

33. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises treating a dysbiosis of the gastrointestinal tract.

34. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises reducing the severity of a dysbiosis of the gastrointestinal tract.

35. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises reducing one or more symptoms of a dysbiosis of the gastrointestinal tract.

36. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises preventing growth and/or colonization of the gastrointestinal tract by a pathogenic bacterium.

37. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises reducing growth and/ or colonization of the gastrointestinal tract by a pathogenic bacterium.

38. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises reducing the number of one or more types of pathogenic bacteria in the gastrointestinal tract.
39. The composition of claim 31, wherein the functional populating of the gastrointestinal tract comprises increasing the number of one or more non-pathogenic bacteria in the gastrointestinal tract.
40. The composition of claim 31, wherein the bacterial composition comprises 0, 1, 2, 3 or greater than 3 types of isolated bacteria capable of forming spores.
41. The composition of claim 31, wherein the bacterial composition comprises at least about 5 types of isolated bacteria capable of forming spores.
42. The composition of claim 31, wherein the bacterial composition comprises at least about 7 types of isolated bacteria capable of forming spores.
43. The composition of claim 31, wherein the first type and the second type are present in the composition in not substantially equal concentrations.
44. The composition of claim 31, wherein the first type and the second type are present in the composition in approximately equal concentrations.
45. The composition of claim 31, wherein the first type is present in the composition in at least about 150% the concentration of the second type.
46. The composition of claim 31, wherein the second type is present in the composition in at least about 150% the concentration of the first type.
47. The composition of claim 31, wherein the composition consists essentially of between two and about ten types of isolated bacteria, wherein at least one type of isolated bacteria are independently capable of spore formation.
48. The composition of claim 31, wherein the first type of isolated bacterium and the second type of isolated bacterium are selected from Table 1.
49. The composition of claim 31, wherein the first type of isolated bacterium and the second type of isolated bacterium comprise an operational taxonomic unit (OTU) distinction.
50. The composition of claim 49, wherein the OTU distinction comprises 16S rRNA sequence similarity below about 95% identity.
51. The composition of claim 31, wherein the first type of isolated bacterium and the second type of isolated bacterium independently comprise bacteria that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.

52. The composition of claim 36, wherein a combination of the first type and the second type are cytotoxic or cytostatic to the pathogenic bacterium.
53. The composition of claim 52, wherein the combination is capable of inhibiting proliferation of the pathogenic bacteria present at a concentration at least equal to the concentration of the combination of the first type and the second type.
54. The composition of claim 52, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type.
55. The composition of claim 52, wherein the combination is capable of inhibiting proliferation of the pathogenic bacteria present at a concentration at least about ten times the concentration of the combination of the first type and the second type.
56. The composition of claim 52, wherein the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE).
57. The composition of claim 52, wherein the first type and the second type synergistically interact to be cytotoxic to the pathogenic bacterium.
58. The composition of claim 52, wherein the first type and the second type synergistically interact to be cytostatic to the pathogenic bacterium.
59. A single dose unit comprising the composition of any one of claims 1, 21, 22, or 31.
60. The dose unit of claim 59, comprising at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of either spores or vegetative bacterial cells.
61. The dose unit of claim 59, comprising a pharmaceutically acceptable excipient, an enteric coating or a combination thereof.
62. The dose unit of claim 59, further comprising a drug selected from corticosteroids, mesalazine, mesalamine, sulfasalazine, sulfasalazine derivatives,

immunosuppressive drugs, cyclosporin A, mercaptopurine, azathiopurine, prednisone, methotrexate, antihistamines, glucocorticoids, epinephrine, theophylline, cromolyn sodium, anti-leukotrienes, anti-cholinergic drugs for rhinitis, anti-cholinergic decongestants, mast-cell stabilizers, monoclonal anti-IgE antibodies, vaccines, and combinations thereof.

63. The dose unit of claim 59, formulated for oral administration, rectal administration, or the combination of oral and rectal administration.

64. The dose unit of claim 59, formulated for topical, nasal or inhalation administration.

65. A kit comprising in one or more containers: a first purified population of a first type of bacterial spores substantially free of viable vegetal bacterial cells; and a second purified population of a second type of bacterial spores substantially free of viable vegetal bacterial cells, wherein the first type and the second type of bacterial spores are not identical, and wherein the first type and the second type of bacterial spores, when co-localized in a target region of a gastrointestinal tract of a human subject in need thereof, are capable of functionally populating the gastrointestinal tract.

66. The kit of claim 65, wherein the first purified population and the second purified population are present in a single container.

67. The kit of claim 65, wherein the first purified population and the second purified population are present in two containers.

68. The kit of claim 65, wherein the first purified population and the second purified population are lyophilized or substantially dehydrated.

69. The kit of claim 65, further comprising in one or more containers an effective amount of an anti-bacterial agent, an effective amount of an anti-viral agent, an effective amount of an anti-fungal agent, an effective amount of an anti-parasitic agent, or a combination thereof in one or more containers.

70. The kit of claim 65, further comprising a pharmaceutically acceptable excipient or diluent.

71. A pharmaceutical formulation comprising an effective amount of the composition of any one of claims 1, 21, 22 and 31, and further comprising an effective amount of an anti-bacterial agent.

72. A pharmaceutical formulation comprising an effective amount of the composition of any one of claims 1, 21, 22 and 31 and further comprising an effective amount of an anti-fungal agent.
73. A pharmaceutical formulation comprising an effective amount of the composition of any one of claims 1, 21, 22 and 31 and further comprising an effective amount of an anti-viral agent.
74. A pharmaceutical formulation comprising an effective amount of the composition of any one of claims 1, 21, 22 and 31 and further comprising an effective amount of an anti-parasitic agent.
75. A comestible product comprising a first purified population of a first type of bacterial spores and a second purified population of a second type of bacterial spores, wherein the first type and the second type of bacterial spores are not identical, wherein the comestible product is substantially free of viable vegetal bacterial cells, and wherein the first type and the second type of bacterial spores, when administered to a human subject in need thereof, are capable of functionally populating the gastrointestinal tract of the human subject.
76. The comestible product of claim 75, comprising a food or food additive.
77. The comestible product of claim 75, comprising a beverage or beverage additive.
78. The comestible product of claim 75, comprising a medical food.
79. The comestible product of claim 75, comprising at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of viable spores.
80. The comestible product of claim 75, wherein the first type of bacterial spores and the second type of bacterial spores are selected from Table 1.
81. The comestible product of claim 75, wherein the first type of bacterial spores and the second type of bacterial spores independently comprise bacterial spores that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.
82. A method comprising administering to a human subject in need thereof an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein:
- i) the first type and the second type are independently capable of forming a spore;

- ii) only one of the first type and the second type are capable of forming a spore or
- iii) neither the first type nor the second type are capable of forming a spore,

wherein the first type and the second type are not identical, and wherein at least one of the first type and the second type exert an inhibitory-effect on a pathogenic bacterium present in the gastrointestinal tract of the human subject, such that the number of pathogenic bacteria present in the gastrointestinal tract is not detectably increased or is detectably decreased over a period of time.

83. The method of claim 82, wherein the human subject is diagnosed as having a dysbiosis of the gastrointestinal tract.

84. The method of claim 82, wherein the human subject is diagnosed as infected with a pathogenic bacterium selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant *Enterococci* (VRE).

85. The method of claim 84, wherein the bacterial composition is administered simultaneously with i) an antibiotic, ii) a prebiotic, or iii) a combination of i) and ii).

86. The method of claim 84, wherein the bacterial composition is administered prior to administration of i) an antibiotic, ii) a prebiotic, or iii) a combination of i) and ii).

87. The method of claim 84, wherein the bacterial composition is administered subsequent to administration of i) an antibiotic, ii) a prebiotic, or iii) a combination of i) and ii).

88. The method of claim 84, wherein the number of pathogenic bacterium present in or excreted from the gastrointestinal tract of the human subject is detectably reduced within one month, within two weeks, or within one week of administration of the bacterial composition.

89. The method of claim 84, wherein the number of pathogenic bacterium present in or excreted from the gastrointestinal tract of the human subject is detectably reduced within three days, two days or one day of administration of the bacterial composition.
90. The method of claim 84, wherein the human subject is detectably free of the pathogenic bacterium within one month, two weeks, one week, three days or one day of administration of the bacterial composition.
91. The method of claim 82, wherein the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria.
92. The method of claim 82, wherein the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9, or 10 types of isolated bacteria and at least 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 of the isolated bacteria are capable of forming spores.
93. The method of claim 82, wherein the bacterial composition comprises at least about 5 types of isolated bacteria and at least 2 of the isolated bacteria are capable of forming spores.
94. The method of claim 82, wherein the bacterial composition comprises: i) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria capable of forming spores, ii) at least about 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 or more types of isolated bacteria not known to be capable of forming spores, or iii) any combination of i) and ii).
95. The method of claim 82, wherein the bacterial composition comprises at least about 5 types of isolated bacteria and at least 1 of the isolated bacteria are capable of forming spores.
96. The method of claim 82, wherein the bacterial composition comprises at least about 5 types of isolated bacteria and at least 1 of the isolated bacteria is not capable of forming spores.
97. The method of claim 82, wherein the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria, wherein i) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are capable of forming spores, ii) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are not capable of forming spores, or iii) any combination of i) and ii).
98. The method of claim 82, wherein the first type and the second type are present in the composition in approximately equal concentrations.

99. The method of claim 82, wherein the first type and the second type are present in the composition in not substantially equal concentrations.
100. The method of claim 82, wherein the first type is present in the composition in at least about 150% the concentration of the second type, or wherein the second type is present in the composition in at least about 150% the concentration of the first type.
101. The method of claim 82, wherein the composition consists essentially of between two and about ten types of isolated bacteria, wherein at least two types of isolated bacteria are independently capable of spore formation.
102. The method of claim 82, wherein the composition consists essentially of between two and about ten types of isolated bacteria, wherein at least two types of isolated bacteria are not capable of spore formation.
103. The method of claim 82, wherein the first type of isolated bacterium and the second type of isolated bacterium are selected from Table 1.
104. The method of claim 82, wherein the first type of isolated bacterium and the second type of isolated bacterium comprise an operational taxonomic unit (OTU) distinction.
105. The method of claim 104, wherein the OTU distinction comprises 16S rRNA sequence similarity below about 95% identity.
106. The method of claim 82, wherein the first type of isolated bacterium and the second type of isolated bacterium independently comprise bacteria that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.
107. The method of claim 82, wherein a combination of the first type and the second type are cytotoxic or cytostatic to the pathogenic bacterium.
108. The method of claim 87, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least equal to the concentration of the combination of the first type and the second type.
109. The method of claim 87, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type.
110. The method of claim 87, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type.

111. The method of claim 107, wherein the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE).

112. The method of claim 107, wherein the first type and the second type synergistically interact to be cytotoxic to the pathogenic bacterium.

113. The method of claim 107, wherein the first type and the second type synergistically interact to be cytostatic to the pathogenic bacterium.

114. A method of functionally populating the gastrointestinal tract of a human subject, comprising administering to the subject an effective amount of a bacterial composition comprising at least a first type of isolated bacterium and a second type of isolated bacterium, wherein:

- i) the first type and the second type are independently capable of forming a spore;
- ii) only one of the first type and the second type are capable of forming a spore or
- iii) neither the first type nor the second type are capable of forming a spore,

wherein the first type and the second type are not identical, under conditions such that the first type and the second type functionally populate the gastrointestinal tract of the human subject.

115. The method of claim 114, wherein the bacterial composition is orally administered, rectally administered, or the combination of orally and rectally administered.

116. The method of claim 114, wherein the bacterial composition is topically or nasally administered or inhaled.

117. The method of claim 114, wherein the first type of isolated bacteria and the second type of isolated bacteria are selected from Table 1.

118. The method of claim 114, wherein the bacterial composition consists essentially of spores, wherein the spores comprise spores of the first type of isolated bacteria and spores of the second type of isolated bacteria.

119. The method of claim 114, wherein the first type of isolated bacteria and the second type of isolated bacteria independently comprise bacterial spores that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.

120. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises preventing a dysbiosis of the gastrointestinal tract.

121. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises treating a dysbiosis of the gastrointestinal tract.

122. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises reducing the severity of a dysbiosis of the gastrointestinal tract.

123. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises reducing one or more symptoms of a dysbiosis of the gastrointestinal tract.

124. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises preventing colonization of the gastrointestinal tract by a pathogenic bacterium.

125. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises reducing colonization of the gastrointestinal tract and/or growth by a pathogenic bacterium.

126. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises reducing the number of one or more types of pathogenic bacteria in the gastrointestinal tract.

127. The method of claim 114, wherein the functional populating of the gastrointestinal tract comprises increasing the number of one or more non-pathogenic bacteria in the gastrointestinal tract.

128. The method of claim 114, wherein the bacterial composition comprises at least about 3, 5, 7 or 9 types of isolated bacteria capable of forming spores.

129. The method of claim 114, wherein the bacterial composition comprises at least about 5 types of isolated bacteria and at least 20% of the isolated bacteria are capable of forming spores.

130. The method of claim 114, wherein the bacterial composition comprises at least about 5 types of isolated bacteria and at least 2 of the isolated bacteria are capable of forming spores.

131. The method of claim 114, wherein the bacterial composition comprises at least about 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria, wherein i) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are capable of forming spores, ii) at least 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 types of isolated bacteria are not capable of forming spores, or iii) any combination of i) and ii).

132. The method of claim 114, wherein the first type and the second type are present in the composition in approximately equal concentrations.

133. The method of claim 114, wherein the first type and the second type are present in the composition in not substantially equal concentrations.

134. The method of claim 114, wherein the first type is present in the composition in at least about 150% the concentration of the second type, or wherein the second type is present in the composition in at least about 150% the concentration of the first type.

135. The method of claim 114, wherein the composition consists essentially of between two and about ten types of isolated bacteria, wherein i) at least one type of isolated bacteria is capable of spore formation, ii) at least one type of isolated bacteria is not capable of spore formation, or iii) a combination of i) and ii).

136. The method of claim 114, wherein a combination of the first type and the second type are inhibitory to the pathogenic bacterium.

137. The method of claim 136, wherein the combination reduces the growth rate of the pathogenic bacterium.

138. The method of claim 136, wherein the combination is cytostatic or cytotoxic to the pathogenic bacterium.

139. The method of claim 136, wherein the combination is capable of inhibiting growth of the pathogenic bacterial present at a concentration at least equal to the concentration of the combination of the first type and the second type.

140. The method of claim 136, wherein the combination is capable of inhibiting growth of the pathogenic bacterial present at a concentration at least about twice the concentration of the combination of the first type and the second type.

141. The method of claim 136, wherein the combination is capable of inhibiting proliferation of the pathogenic bacterial present at a concentration at least about ten times the concentration of the combination of the first type and the second type.

142. The method of claim 136, wherein the pathogenic bacterium is selected from the group consisting of *Yersinia*, *Vibrio*, *Treponema*, *Streptococcus*, *Staphylococcus*, *Shigella*, *Salmonella*, *Rickettsia*, *Orientia*, *Pseudomonas*, *Neisseria*, *Mycoplasma*, *Mycobacterium*, *Listeria*, *Leptospira*, *Legionella*, *Klebsiella*, *Helicobacter*, *Haemophilus*, *Francisella*, *Escherichia*, *Ehrlichia*, *Enterococcus*, *Coxiella*, *Corynebacterium*, *Clostridium*, *Chlamydia*, *Chlamydophila*, *Campylobacter*, *Burkholderia*, *Brucella*, *Borrelia*, *Bordetella*, *Bifidobacterium*, *Bacillus*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), extended spectrum beta-lactam resistant *Enterococci* (ESBL), and vancomycin-resistant Enterococci (VRE).

143. The method of claim 136, wherein the first type and the second type synergistically interact to reduce or inhibit the growth of the pathogenic bacterium.

144. The method of claim 114, wherein the first type and the second type synergistically interact to reduce or inhibit the colonization of the pathogenic bacterium.

145. The method of claim 114, comprising administering to the human subject a single dose unit comprising at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of viable bacteria.

146. The method of claim 145, wherein the dose unit comprises a bacterial population substantially in the form of spores.

147. The method of claim 145, wherein the dose unit comprises a pharmaceutically acceptable excipient and/or an enteric coating.

148. The method of claim 145, wherein the unit dose is formulated for oral administration, rectal administration, or the combination of oral and rectal administration.

149. The method of claim 145, wherein the unit dose is formulated for topical or nasal administration or for inhalation.

150. A method of reducing the number of pathogenic bacteria present in the gastrointestinal tract of a human subject, comprising administering to the subject an effective amount of a pharmaceutical formulation comprising an effective amount of the composition of any one of claims 1, 21, 22 or 31, and further comprising an

effective amount of an anti-microbial agent, under conditions such that the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about one month of administration of the pharmaceutical formulation.

151. The method of claim 150, wherein the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about two weeks of administration of the pharmaceutical formulation.

152. The method of claim 150, wherein the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about one week of administration of the pharmaceutical formulation.

153. The method of claim 150, wherein the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about three days of administration of the pharmaceutical formulation.

154. The method of claim 150, wherein the number of pathogenic bacteria present in the gastrointestinal tract of the human subject is reduced within about one day of administration of the pharmaceutical formulation.

155. The method of claim 150, wherein the anti-microbial agent comprises anti-bacterial agent.

156. The method of claim 150, wherein the anti-microbial agent comprises anti-fungal agent.

157. The method of claim 150, wherein the anti-microbial agent comprises anti-viral agent.

158. The method of claim 150, wherein the anti-microbial agent comprises anti-parasitic agent.

159. A method of preparing a comestible product, comprising combining with a comestible carrier a first purified population comprising at least a first type of isolated bacterium and a second purified population comprising at least a second type of isolated bacterium, wherein:

- i) the first type and the second type are independently capable of forming a spore;
- ii) only one of the first type and the second type are capable of forming a spore or
- iii) neither the first type nor the second type are capable of forming a spore,

wherein the first type and the second type of bacteria are not identical,
wherein the comestible product is substantially free of non-comestible materials.

160. The method of claim 159, wherein at least one of the first purified population and the second purified population consist essentially of viable spores.

161. The method of claim 159, wherein the first purified population and the second purified population consist essentially of viable spores.

162. The method of claim 159, wherein the comestible product is substantially free of viable vegetal bacterial cells.

163. The method of claim 161, wherein the viable spores, when the comestible product is consumed by a human subject in need thereof, are capable of functionally populating the gastrointestinal tract of the human subject.

164. The method of claim 159, wherein the comestible product comprises a food or food additive.

165. The method of claim 159, wherein the comestible product comprises a beverage or beverage additive.

166. The method of claim 159, wherein the comestible product comprises a medical food.

167. The method of claim 159, wherein the comestible product comprises at least 1×10^4 , 1×10^5 , 1×10^6 , 1×10^7 , 1×10^8 , 1×10^9 , 1×10^{10} , 1×10^{11} or greater than 1×10^{11} colony forming units (CFUs) of viable spores.

168. The method of claim 159, wherein spores are of a bacterium selected from Table 1.

169. The method of claim 159, wherein the first purified population and the second purified population independently comprise bacterial spores that comprise 16S rRNA sequence at least 95% identical to 16S rRNA sequence present in a bacterium selected from Table 3.

170. A method of reducing the abundance of a pathogen in the gastrointestinal tract of a patient comprising administering the composition of claim 1 in a therapeutically effective amount and allowing the bacterial composition to compete with the pathogen in the gastrointestinal tract of a patient.

171. A method of treating diarrhea comprising administering the composition of claim 1 in a therapeutically effective amount and allowing the bacterial composition to reduce the diarrheal effect of a pathogen in the gastrointestinal tract of a patient.

172. The method of claim 170 or 171, wherein the pathogen is *Aeromonas hydrophila*, *Campylobacter fetus*, *Plesiomonas shigelloides*, *Bacillus cereus*, *Campylobacter jejuni*, *Clostridium botulinum*, *Clostridium difficile*, *Clostridium perfringens*, enteroaggregative *Escherichia coli*, enterohemorrhagic *Escherichia coli*, enteroinvasive *Escherichia coli*, enterotoxigenic *Escherichia coli* (LT or ST), *Escherichia coli* 0157:H7, *Helicobacter pylori*, *Lysteria monocytogenes*, *Plesiomonas shigelloides*, *Salmonella* spp., *Salmonella typhi*, *Shigella* spp., *Staphylococcus* spp., *Staphylococcus aureus*, *Vibrio* spp., *Vibrio cholerae*, *Vibrio parahaemolyticus*, *Vibrio vulnificus*, *Yersinia enterocolitica*, multi-drug resistant bacteria, Carbapenem-resistant Enterobacteriaceae (CRE), and vancomycin-resistant Enterococci (VRE).
173. The method of claim 170 or 171, wherein the pathogen is *Clostridium difficile*, *Salmonella* spp., pathogenic *Escherichia coli*, or vancomycin-resistant *Enterococcus* spp.
174. The method of claim 170 or 171, wherein the pathogen is *Clostridium difficile*.
175. The method of claim 170 or 171, wherein the composition is administered orally.