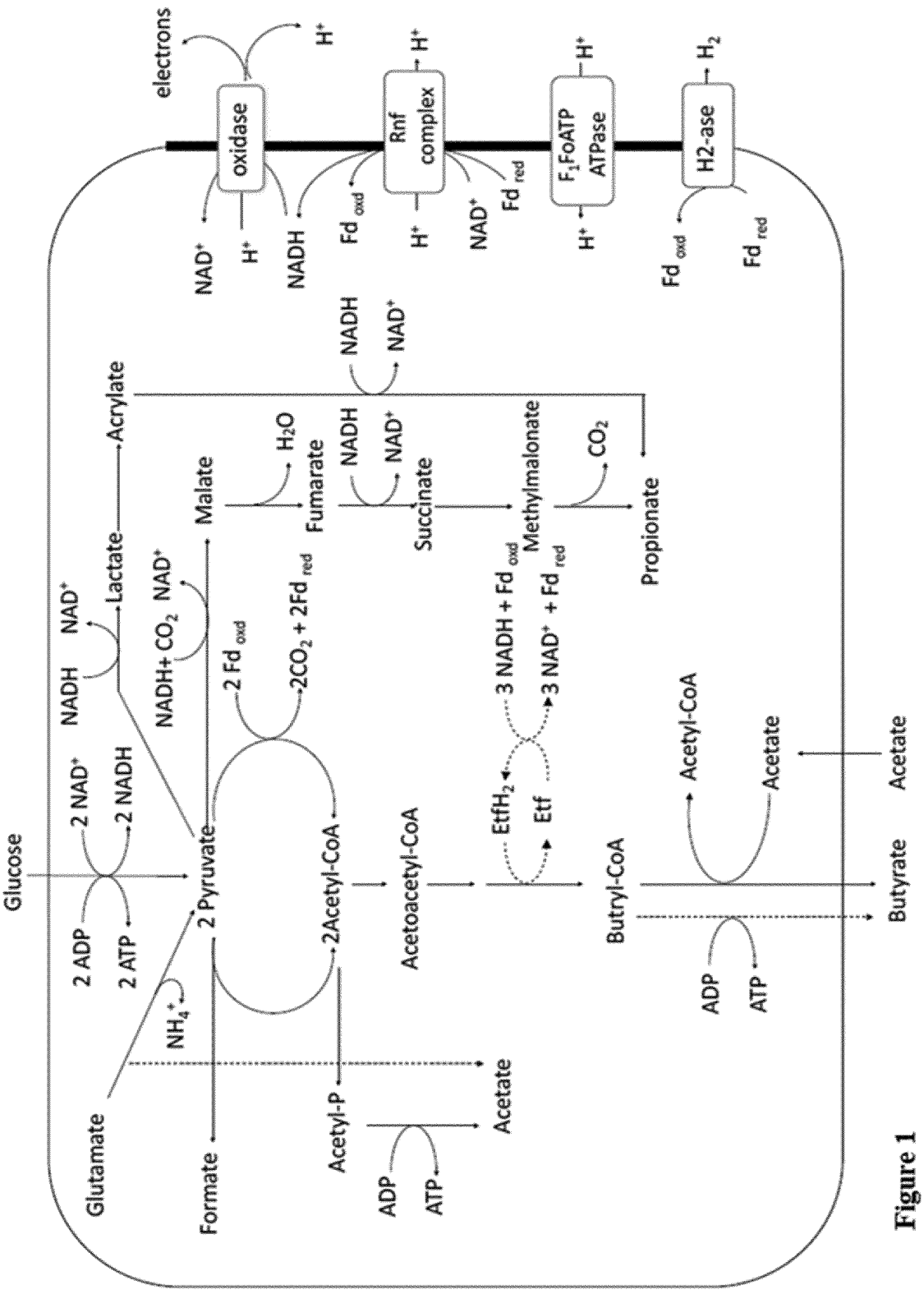

electrons
oxidase
Rnf complex
F1FoATP ATPase
H2-ase
H+
H2
NAD+
NADH
Fd oxd
Fd red
Glucose
2 Pyruvate
2 NAD+
2 NADH
2 ADP
2 ATP
NH4+
Glutamate
Formate
Lactate
Acrylate
Malate
Fumarate
Succinate
Methylmalonate
Propionate
CO2
H2O
NADH+ CO2
2 Fd oxd
2CO2 + 2Fd red
2Acetyl-CoA
Acetoacetyl-CoA
3 NADH + Fd oxd
3 NAD+ + Fd red
EtfH2
Etf
Butryl-CoA
Acetyl-CoA
Acetate
Butyrate
Acetyl-P
ADP
ATP

Figure 1

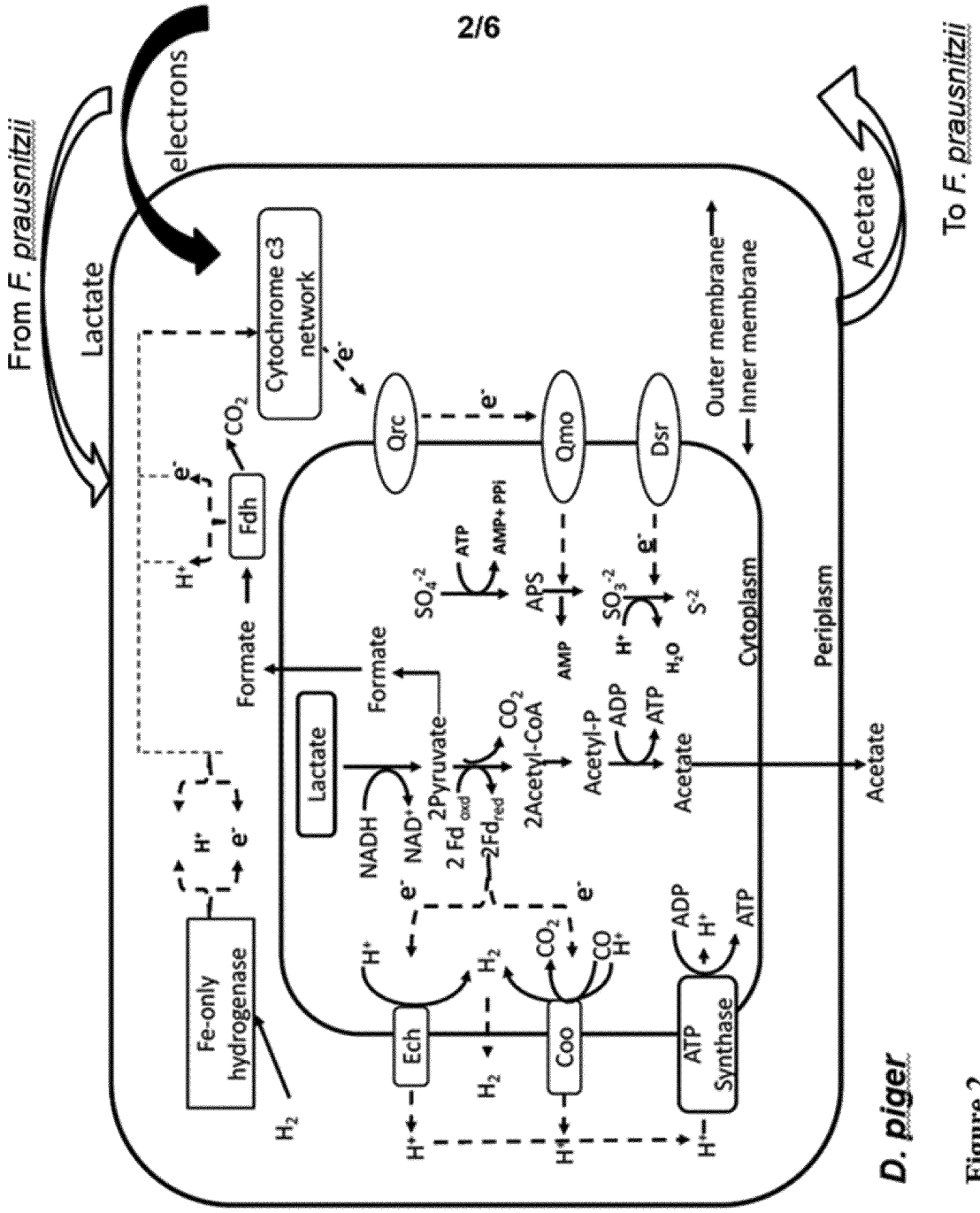

From F. prausnitzii
Lactate
electrons
To F. prausnitzii
Acetate
Cytochrome c3 network
Qrc
Qmo
Dsr
Outer membrane
Inner membrane
Fdh
CO2
e-
H+
Formate
Lactate
NADH
NAD+
2Pyruvate
2 Fd oxd
2Fdred
CO2
2Acetyl-CoA
Acetyl-P
ADP
ATP
Acetate
SO4-2
ATP
AMP+ PPi
APS
AMP
SO3-2
S-2
H2O
Cytoplasm
Periplasm
Fe-only hydrogenase
H2
Ech
Coo
ATP Synthase
CO
D. piger

Figure 2

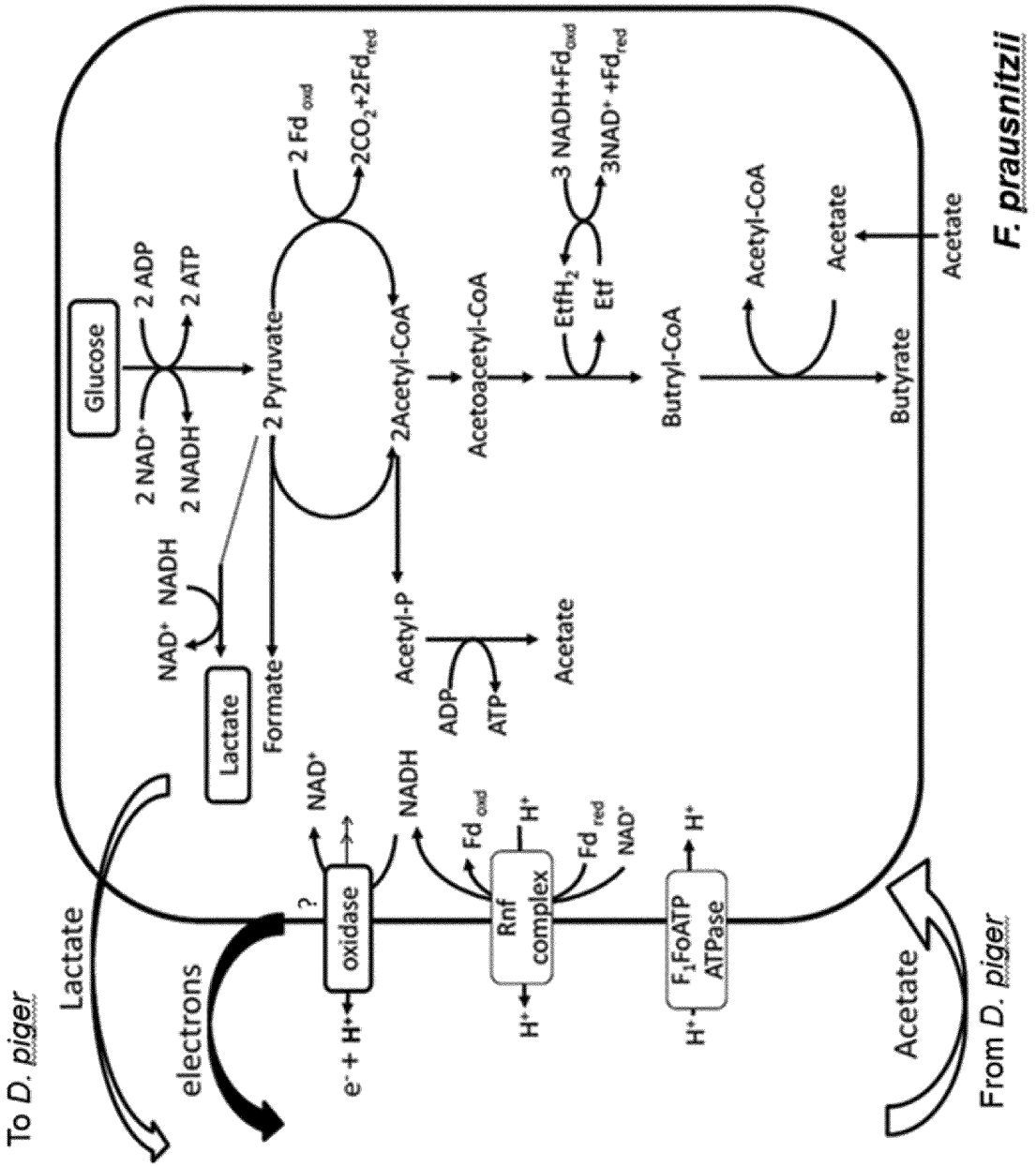


Figure 2 (cont.)

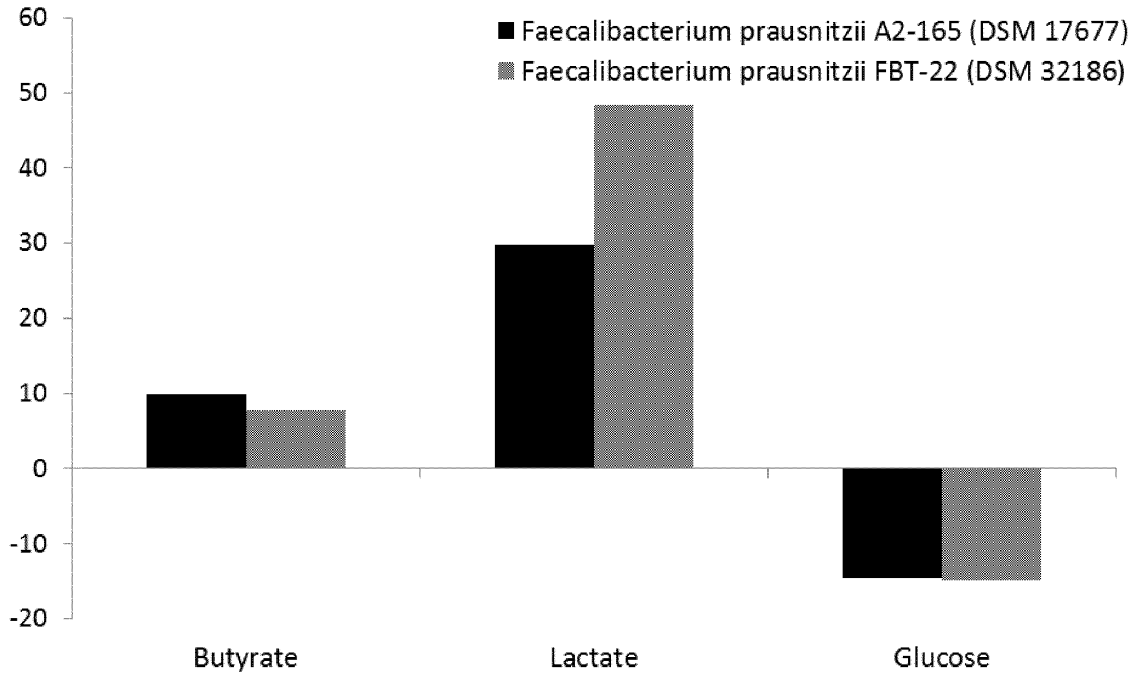

60
50
40
30
20
10
0
-10
-20
Faecalibacterium prausnitzii A2-165 (DSM 17677)
Faecalibacterium prausnitzii FBT-22 (DSM 32186)
Butyrate
Lactate
Glucose

Figure 3

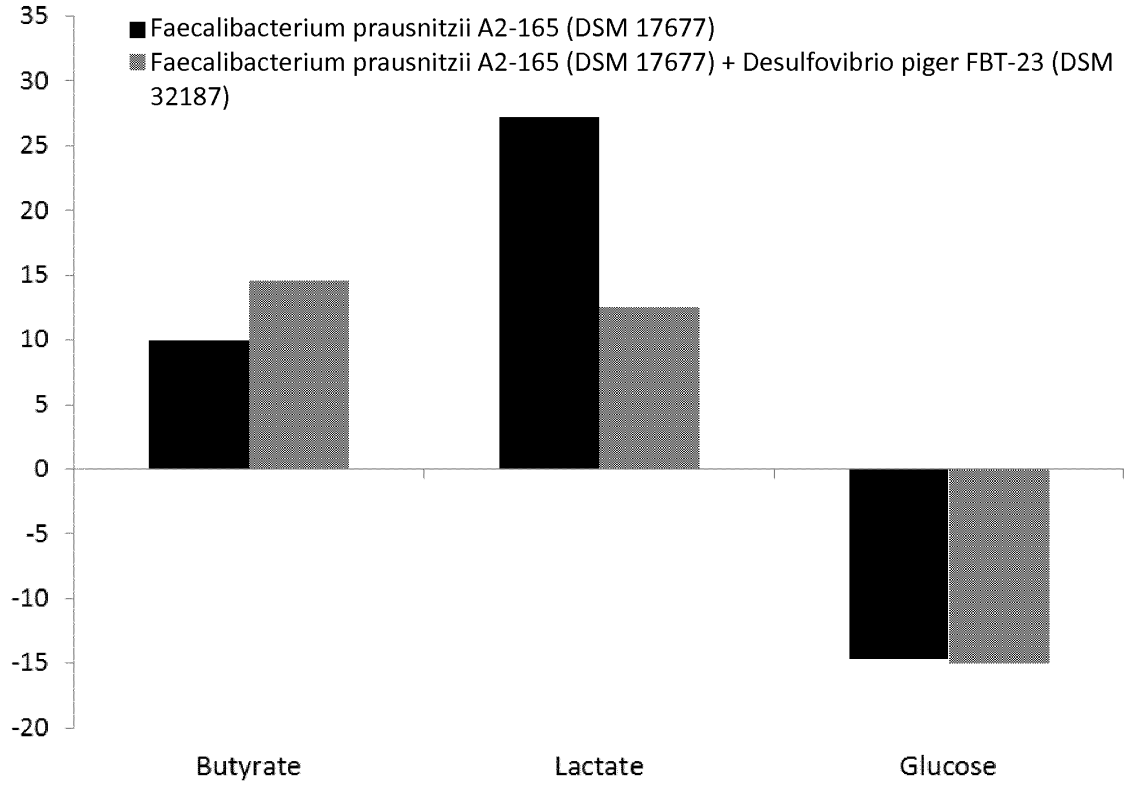

35
30
25
20
15
10
5
0
-5
-10
-15
-20
Faecalibacterium prausnitzii A2-165 (DSM 17677)
Faecalibacterium prausnitzii A2-165 (DSM 17677) + Desulfovibrio piger FBT-23 (DSM 32187)
Butyrate
Lactate
Glucose

Figure 4

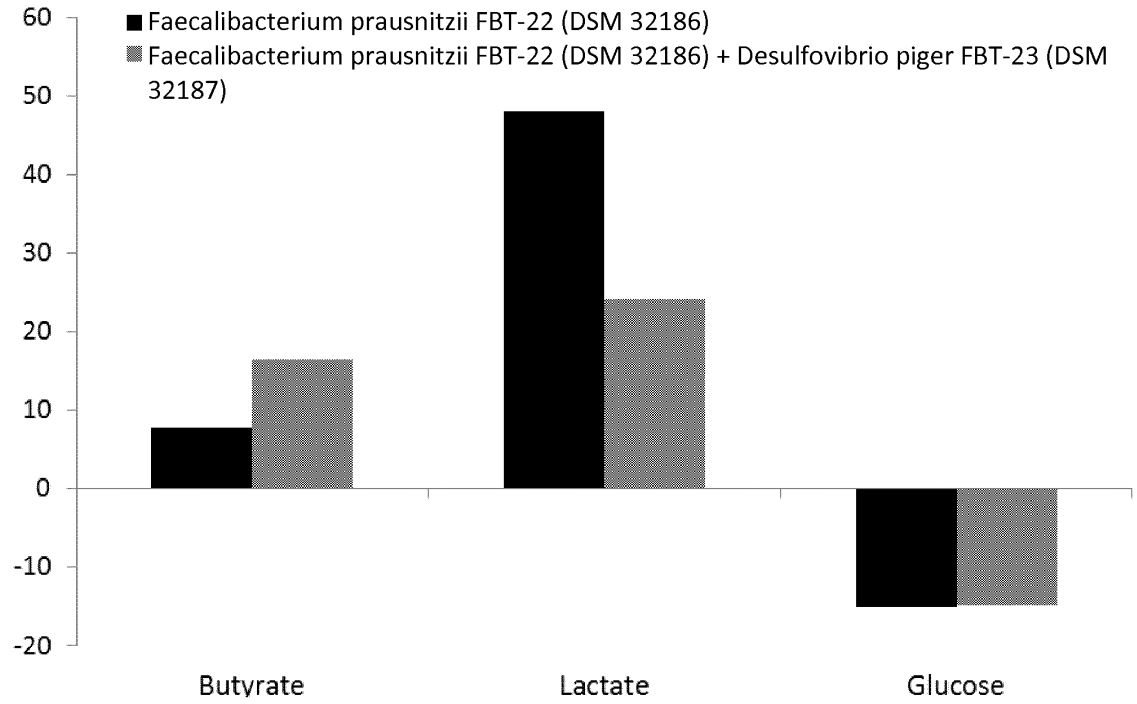

60
50
40
30
20
10
0
-10
-20
Faecalibacterium prausnitzii FBT-22 (DSM 32186)
Faecalibacterium prausnitzii FBT-22 (DSM 32186) + Desulfovibrio piger FBT-23 (DSM 32187)
Butyrate
Lactate
Glucose

Figure 5