Claims

1. A *Bacteroides thetaiotaomicron* deposited as Accession Number 42341 at NCIMB.

2. A composition comprising a *Bacteroides thetaiotaomicron* as defined in claim 1.

3. A pharmaceutical composition comprising a *Bacteroides thetaiotaomicron* as defined in claim 1, and a pharmaceutically acceptable excipient, carrier or diluent.

4. A nutritional supplement comprising a *Bacteroides thetaiotaomicron* as defined in claim 1, and a nutritionally acceptable excipient, carrier or diluent.

5. The composition comprising a *Bacteroides thetaiotaomicron* as defined in claim 2, the pharmaceutical composition comprising a *Bacteroides thetaiotaomicron* as defined in claim 3, or the nutritional supplement comprising a *Bacteroides thetaiotaomicron* as defined in claim 4, wherein said *Bacteroides thetaiotaomicron* is encapsulated.

6. A feedstuff, food product, dietary supplement, or food additive comprising a *Bacteroides thetaiotaomicron* as defined in claim 1.

7. The feedstuff, food product, dietary supplement, or food additive according to claim 6, wherein said feedstuff, food product, dietary supplement, or food additive is encapsulated.

8. Use of a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7, in the manufacture of a medicament for reducing the inflammation of a tissue or an organ in a subject.

9. The use of claim 8, wherein said *Bacteroides thetaiotaomicron* reduces the inflammation by epithelial cells of the tissue or the organ, optionally wherein said epithelial cells are epithelial cells of the alimentary canal.

10. Use of a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7, in the manufacture of a medicament for treating and/or preventing a disorder in a subject, wherein said disorder is an inflammatory disorder and/or an autoimmune disorder and/or an allergic disorder, optionally wherein said disorder affects the alimentary canal, a section of the alimentary canal, and/or epithelial cells.

11. The use of claim 10, wherein said disorder is selected from the group consisting of inflammatory bowel disorder (IBD), colitis, rheumatoid arthritis, psoriasis, multiple sclerosis, type I diabetes, coeliac disease, atopic dermatitis, rhinitis, irritable bowel syndrome (IBS), ulcerative colitis, pouchitis, Crohn's disease, functional dyspepsia, atopic diseases, necrotising enterocolitis, on alcoholic fatty liver disease, gastrointestinal infection and combinations thereof.

12. Use of a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7, in the manufacture of a medicament for reducing disruption to the colon of a subject, optionally wherein said subject has IBD.

13. The use of claim 12, wherein said *Bacteroides thetaiotaomicron*, composition, pharmaceutical composition, nutritional supplement, feedstuff, food product, dietary supplement, or food additive reduces or prevents disruption to the integrity of the mucosal epithelium and/or reduces or prevents a reduction in the number of goblet cells in the epithelium and/or reduces or
prevents the infiltration of immune cells into the lamina propria.

14. Use of a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7, in the manufacture of a medicament for reducing the expression of one or more pro-inflammatory genes in a cell or cells of a subject, optionally wherein said pro-inflammatory genes is selected from the group consisting of IL1 -β, IL6, IL8, IL10 and combinations thereof, and/or wherein said cell is an alimentary canal cell (such as a cell of the ascending colon), or an epithelial cell (such as an intestinal epithelial cell).

15. A method for reducing the expression of one or more pro-inflammatory genes in a cell or cells of a subject, optionally wherein said pro-inflammatory genes is selected from the group consisting of IL1 -β, IL6, IL8, IL10 and combinations thereof, and/or wherein said cell is an alimentary canal cell (such as a cell of the ascending colon), or an epithelial cell (such as an intestinal epithelial cell), the method comprising administering to the subject a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a

feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7.

16. Use of a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7, in the manufacture of a medicament for increasing the percentage of regulatory T cells (Tregs) in the alimentary canal or a section of the alimentary canal in a subject, optionally wherein said section of the alimentary canal is the small intestine lamina propria.

17. A method for increasing the percentage of regulatory T cells (Tregs) in the alimentary canal or a section of the alimentary canal in a subject, optionally wherein said section of the alimentary canal is the small intestine lamina propria, the method comprising administering to the subject a *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 5, a pharmaceutical composition as defined in claim 3 or 5, a nutritional supplement as defined in claim 4 or 5 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 6 or 7.

18. A process for producing a pharmaceutical composition according to claim 3 or 5, said process comprising admixing said *Bacteroides thetaiotaomicron* with a pharmaceutically acceptable excipient, carrier or diluent.

19. A process for producing a nutritional supplement according to claim 4 or 5, said process comprising admixing said *Bacteroides thetaiotaomicron* with a nutritionally acceptable excipient, carrier or diluent.

20. A process for producing a feedstuff, food product, dietary supplement, or food additive according to claim 6 or 7, said process comprising admixing said *Bacteroides thetaiotaomicron* with a feedstuff, food product, dietary supplement, food additive or ingredient thereof.

21. The process of any one of claims 18-20, wherein *Bacteroides thetaiotaomicron* is encapsulated in said process.