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. The composition according to claim 2 wherein said *Bacteroides thetaiotaomicron* is encapsulated.

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

5. The pharmaceutical composition according to claim 4 wherein said *Bacteroides thetaiotaomicron* is encapsulated.

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

7. The nutritional supplement composition according to claim 6 wherein said *Bacteroides thetaiotaomicron* is encapsulated.

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

9. The feedstuff, food product, dietary supplement, or food additive according to claim 8 wherein said feedstuff, food product, dietary supplement, or food additive is encapsulated.

10. A *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 3, a pharmaceutical composition as defined in claim 4 or 5, a nutritional supplement as defined in claim 6 or 7 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 8 or 9, for use in reducing the inflammation of the tissue or the organ.

11. The *Bacteroides thetaiotaomicron*, the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 10 wherein said *Bacteroides thetaiotaomicron* reduces the inflammation by epithelial cells of the tissue or the organ.

12. The *Bacteroides thetaiotaomicron*, the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 11 wherein said epithelial cells are epithelial cells of the alimentary canal.

13. A *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 3, a pharmaceutical composition as defined in claim 4 or 5, a nutritional supplement as defined in claim 6 or 7 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 8 or 9, for use in the treatment and/or prevention of a disorder in a subject; wherein said disorder is an inflammatory disorder and/or an autoimmune disorder and/or an allergic disorder.

14. The *Bacteroides thetaiotaomicron*, the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 13 wherein said disorder affects the alimentary canal, a section of the alimentary canal, and/or epithelial cells.

15. The *Bacteroides thetaiotaomicron,* the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 13 or 14 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, non alcoholic fatty liver disease, gastrointestinal infection and combinations thereof.

16. The *Bacteroides thetaiotaomicron,* the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 13 or 14 wherein said disorder is an inflammatory bowel disorder (IBD), Crohn’s disease, coeliac disease or ulcerative colitis.

17. A *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 3, a pharmaceutical composition as defined in claim 4 or 5, a nutritional supplement as defined in claim 6 or 7 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 8 or 9 for use in reducing disruption to the colon of a subject, optionally wherein said subject has IBD.

18. The *Bacteroides thetaiotaomicron,* the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 17 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.

19. A *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 3, a pharmaceutical composition as defined in claim 4 or 5, a nutritional supplement as defined in claim 6 or 7 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 8 or 9 for use in reducing the expression of one or more pro-inflammatory genes in a cell or cells of a subject.

20. The *Bacteroides thetaiotaomicron,* the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 19 wherein said pro-inflammatory genes is selected from the group consisting of IL1-β, IL6, IL8, IL10 and combinations thereof.

21. The *Bacteroides thetaiotaomicron,* the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary supplement, or the food additive for use according to claim 19 or 20 wherein said cell is an alimentary canal cell (such as a cell of the ascending colon), or an epithelial cells (such as an intestinal epithelial cell).

22. A *Bacteroides thetaiotaomicron* as defined in claim 1, a composition as defined in claim 2 or 3, a pharmaceutical composition as defined in claim 4 or 5, a nutritional supplement as defined in claim 6 or 7 or a feedstuff, a food product, a dietary supplement, or a food additive as defined in claim 8 or 9 for use in increasing the percentage of regulatory T cells (Tregs) in the alimentary canal or a section of the alimentary canal.

23. The *Bacteroides thetaiotaomicron,* the composition, the pharmaceutical composition, the nutritional supplement, the feedstuff, the food product, the dietary

supplement, or the food additive for use according to claim 22 wherein said section of the alimentary canal is the small intestine lamina propria.

24. A process for producing a pharmaceutical composition according to claim 4 or 5, said process comprising admixing said *Bacteroides thetaiotaomicron* with a pharmaceutically acceptable excipient, carrier or diluent.

25. A process for producing a nutritional supplement according to claim 6 or 7, said process comprising admixing said *Bacteroides thetaiotaomicron* with a nutritionally acceptable excipient, carrier or diluent.

26. A process for producing a feedstuff, food product, dietary supplement, or food additive according to claim 8 or 9, said process comprising admixing said *Bacteroides thetaiotaomicron* with a feedstuff, food product, dietary supplement, food additive or ingredient thereof.

27. The process of claim 24, 25 or 26, wherein *Bacteriodes thetaiotaomicron* is encapsulated in said process.