

Claims

- 5 1. A combination of osteopontin (OPN) and 2'-fucosyllactose (2-FL) for use in the prevention or the treatment of immunological diseases or disorders due to inflammatory factors secretion affecting a human or an animal subject.
2. The combination according to claim 1 wherein the inflammatory factor is selected from cytokines and immunoglobulins.
- 10 3. The combination according to any of claims 1 and 2 wherein the cytokine is selected from INF- γ , IL-2, IL-4, IL-17, IL-6, IL-10, TGF- β , Tbet, GATA3 and NF κ B and the immunoglobulin is selected from IgE and IgG1.
4. The combination according to any of claims 1 to 3 wherein the immunological disease or disorder is selected from the group comprising atopic dermatitis, psoriasis, allergy, allergic rhinitis, asthma and chronic obstructive pulmonary diseases (COPD).
- 15 5. The combination according to any of the preceding claims wherein osteopontin (OPN) is of either human or animal origin or recombinant OPN.
6. The combination according to any of the preceding claims wherein 2'-fucosyllactose (2-FL) is of either natural or synthetic origin or from bacterial fermentation origin.
- 20 7. The combination according to any of the preceding claims wherein osteopontin (OPN) is provided to the human or animal subject in need thereof at a dosage of about 2.5 to 45, preferably of about 35 to 40 mg/kg body weight/day.
8. The combination according to any of the preceding claims wherein 2'-fucosyllactose (2-FL) is provided to the human or animal subject in need thereof at a dosage of about 75 to 750, preferably of about 600 mg/kg body weight/day.
- 25 9. The combination according to any of the preceding claims wherein osteopontin (OPN) and 2'-fucosyllactose (2-FL) are provided to the human or animal subject in need thereof in the form of one or several single unit dosage forms.
10. The combination according to any of the preceding claims combined with or embedded in a food or nutritional or dietary supplement when provided to the human or animal subject in need thereof.
- 30 11. A method for preventing or treating immunological diseases or disorders due to inflammatory factors secretion affecting a human or an animal subject, which

comprises administering to the subject a combination of osteopontin (OPN) and 2'-fucosyllactose (2-FL).

12. The method according to claim 11 wherein the inflammatory factor is selected from cytokines and immunoglobulins.
- 5 13. The method of any of claims 11 and 12 wherein the cytokine is selected from INF- γ , IL-2, IL-4, IL-17, IL-6, IL-10, TGF- β , Tbet, GATA3 and NF κ B and the immunoglobulin is selected from IgE and IgG1.
- 10 14. The method according to any of claims 10 to 13 wherein the immunological disease or disorder is selected from atopic dermatitis, psoriasis, allergy, allergic rhinitis, asthma and chronic obstructive pulmonary diseases (COPD).
- 15 15. The method according to any of claims 10 to 14 wherein osteopontin (OPN) is of either human or animal origin or recombinant OPN.
16. The method according to any of claims 10 to 15 wherein 2'-fucosyllactose (2-FL) is of either natural or synthetic origin or from bacterial fermentation origin.
- 15 17. The method according to any of claims 10 to 16 wherein osteopontin (OPN) in the combination is provided to the human or animal subject in need thereof at a dosage of about 2.5 to 45, preferably of about 35 to 40 mg/kg body weight/day.
- 20 18. The method according to any of claims 10 to 17 wherein 2'-fucosyllactose (2-FL) in the combination is provided to the human or animal subject in need thereof at a dosage of about 75 to 750, preferably of about 600 mg/kg body weight/day.