Claims

1. Method for producing a composition comprising secretory-like immunoglobulin in vitro, comprising the steps of
   (a) Obtaining a blood-derived protein composition comprising J chain-containing immunoglobulin in a non-purified form, wherein the composition comprises less than 80% J chain-containing IgA and/or less than 80% J chain-containing IgM;
   (b) admixing the composition of step (a) with secretory component.

2. The method of claim 1, wherein the secretory-like immunoglobulin is secretory-like IgA and/or secretory-like IgM.

3. The method of claim 1 or claim 2, wherein the composition of step (a) contains at least 5% J chain-containing IgA.

4. The method of claim 3, wherein the composition of step (a) contains at least 10% J chain-containing IgA.

5. The method of claim 3, wherein the composition of step (a) contains at least 20% J chain-containing IgA.

6. The method of claim 3, wherein the composition of step (a) contains at least 30% J chain-containing IgA.

7. The method of claim 3, wherein the composition of step (a) contains at least 50% J chain-containing IgA.

8. The method of any previous claim, wherein the composition of step (a) is derived from human blood.

9. The method of any previous claim, wherein the secretory component in step (b) is recombinant secretory component.

10. The method of any previous claim, wherein the secretory component is human secretory component.

11. The method of any previous claim, wherein the secretory component is produced in a mammalian cell line.

12. The method of any previous claim, wherein the secretory component is the extracellular portion of the polymeric immunoglobulin receptor pIgR.

13. The method of any previous claim, wherein in step (b) the molar ratio between added secretory component and J chain within IgA dimers/polymers ranges between 1:10 and 10:1.

14. The method of claim 13, wherein the ratio ranges between 1:5 and 5:1.

15. The method of claim 14, wherein the ratio ranges between 1:2 and 2:1.

16. A composition comprising less than 80% secretory-like IgA and/or less than 80% secretory-like IgM or a combination thereof obtainable by a method of any of claims 1 to 15.

17. The composition of claim 16, further comprising a pharmaceutically acceptable carrier or excipient.

18. The composition of claim 16 or claim 17 for medical use.

19. The composition according to any one of claims 16 to 18, wherein the composition is for the prevention and/or treatment of infections on mucosal surfaces in a subject.

20. Use of a composition comprising less than 80% secretory-like IgA and/or less than 80% secretory-like IgM or a combination thereof obtainable by a method of any of claims 1 to 15, in the preparation of a medicament for prevention and/or treatment of infection on mucosal surfaces in a subject.

21. The use according to claim 20, wherein the medicament further comprising a pharmaceutically acceptable carrier or excipient.