CLAIMS

1. A method for selecting a lactic acid bacterial strain for use in prophylaxis, inhibition and/or treatment of an allergy in a mammal, said method comprising:

screening lactic acid bacterial strains for capability of producing diacylglycerol kinase (DagK); and

selecting a lactic acid bacterial strain which is capable of producing DagK for use in prophylaxis, inhibition and/or treatment of an allergy in a mammal.

2. The method according to claim 1, wherein selecting lactic acid bacterial strain comprises selecting a lactic acid bacterial strain which is capable of producing DagK and capable of extracellularly releasing DagK.

3. The method according to claim 1 or 2, wherein

screening said lactic acid bacterial strains comprises screening *Lactobacillus reuteri* strains for capability of producing DagK; and

selecting said lactic acid bacterial strain comprises selecting a *L. reuteri* strain which is capable of producing DagK.

4. The method according to any of the claims 1 to 3, wherein

screening said lactic acid bacterial strains comprises screening said lactic acid bacterial strains for presence of a gene encoding DagK, such as the *dagK* gene; and

selecting said lactic acid bacterial strain comprises selecting a lactic acid bacterial strain comprising said gene encoding DagK, such as said *dagK* gene.

5. The method according to any of the claims 1 to 4, wherein

screening said lactic acid bacterial strains comprises screening said lactic acid bacterial strains for presence of DagK in a cytosol of said lactic acid bacterial strains and/or presence of DagK in a respective culture medium in which said lactic acid bacterial strains are cultured; and

selecting said lactic acid bacterial strain comprises selecting a lactic acid bacterial strain i) comprising DagK in its cytosol and/or ii) for which a culture medium in which said lactic acid bacterial strain is cultured comprises DagK.

6. A lactic acid bacterial strain capable of producing diacylglycerol kinase (DagK) for use in prophylaxis, inhibition and/or treatment of an allergy, preferably selected from a group consisting of a food allergy, such as peanut allergy, and a pollen allergy, in a mammal with the proviso that said lactic

acid bacterial strain is not selected from a group consisting of *Lactobacillus reuteri* strain ATCC PTA-6475 and *L. reuteri* strain ATCC PTA-4659.

7. The bacterial strain for use according to claim 6, wherein said bacterial strain is a bacterial strain capable of producing DagK and capable of extracellularly releasing DagK.

8. The bacterial strain for use according to claim 6 or 7 , wherein said lactic acid bacterial strain is a *Lactobacillus reuteri* strain capable of producing DagK.

9. A *Lactobacillus reuteri* strain DSM 32273 for use in prophylaxis, inhibition and/or treatment of an allergy, preferably a food allergy, in a mammal.

10. A *Lactobacillus reuteri* strain ATCC PTA-6475 for use in prophylaxis, inhibition and/or treatment of a food allergy in a mammal.

11. A *Lactobacillus reuteri* strain ATCC PTA-4659 for use in prophylaxis, inhibition and/or treatment of a food allergy in a mammal.

12. A *Lactobacillus fermentum* strain ATCC 14931 for use in prophylaxis, inhibition and/or treatment of an allergy, preferably a pollen allergy, in a mammal.

13. An anti-allergy composition comprising a lactic acid bacterial strain capable of producing diacylglycerol kinase (DagK) and a H1-antihistamine, preferably selected from a group consisting of cetirizine, ebastine, fexofenadine, loratadine and desloratadine.

14. An anti-allergy composition according to claim 13 for use as a medicament.

15. An anti-allergy composition according to claim 13 for use in prophylaxis, inhibition and/or treatment of an allergy in a mammal.