CLAIMS

1. A composition comprising as active ingredients:

probiotics; and

a polypeptide with a binding ability to IgE.

2. The composition according to claim 1,

wherein the probiotics are lactic acid bacteria or Bifidobacterium.

3. The composition according to claim 2,

wherein the lactic acid bacteria are any one selected from the group consisting of *Lactobacillus*, *Lactococcus*, *Enterococcus*, and *Streptococcus*.

4. The composition according to claim 3,

wherein the *Lactobacillus* is any one selected from the group consisting of *L. acidophilus*, *L. casei*, *L. gasseri*, *L. delbrueckii ssp. bulgaricus*, *L. helveticus*, *L. fermentum*, *L. paracasei*, *L. plantarum*, *L. reuteri*, *L. rhamnosus*, *L. pentosus*, and *L. salivarius*,

the *Lactococcus* is *Lc. lactis*, and

the *Streptococcus* is *S. themophilus*.

5. The composition according to claim 2,

wherein the Bifidobacterium is any one selected from the group consisting of *B. bifidum*, *B. breve*, *B. longum*, and *B. animalis ssp. lactis*.

6. The composition according to claim 2,

wherein the probiotics are *L. casei* or *B. longum*.

7. The composition according to claim 1,

wherein the polypeptide with a binding ability to IgE is an anti-IgE antibody.

8. The composition according to claim 7,

wherein the anti-IgE antibody is omalizumab.

9. The composition according to claim 1,

wherein the polypeptide with a binding ability to IgE is a recombinant protein that contains an extracellular domain of an alpha subunit of an IgE Fc receptor or a fragment thereof.

10. The composition according to claim 9,

wherein the extracellular domain of the alpha subunit of the IgE Fc receptor has the amino acid sequence of SEQ ID NO: 1.

11. The composition according to claim 9,

wherein the recombinant protein contains an immunoglobulin Fc region.

12. The composition according to claim 11,

wherein the immunoglobulin Fc region is in a native or modified form.

13. The composition according to claim 1,

wherein the probiotics are in the form of a dried powder.

14. The composition according to claim 9,

wherein the recombinant protein is a polypeptide dimer containing two monomers, each of which contains an extracellular domain (FcεRIαECD) of an alpha subunit of an IgE Fc receptor,

the monomer contains a modified Fc region, and

the modified Fc region and the FcεRIαECD are linked via a linker.

15. A pharmaceutical composition for treating or preventing an allergic disease, comprising:

the composition according to claim 1.

16. The pharmaceutical composition according to claim 15,

wherein the allergic disease is any one selected from the group consisting of food allergy, atopic dermatitis, asthma, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, chronic idiopathic urticaria, and allergic contact dermatitis.

17. A health functional food composition for ameliorating or alleviating an allergic symptom, comprising:

the composition according to claim 1.

18. A kit for treating or preventing an allergic disease, comprising:

a first composition that contains probiotics; and

a second composition that contains a polypeptide with a binding ability to IgE.

19. The kit according to claim 18,

wherein the second composition is a composition for subcutaneous or intravenous administration.

20. A method for treating or preventing an allergic disease, comprising:

a step of administering, to an individual, a composition that contains, as active ingredients, probiotics and a polypeptide with a binding ability to IgE.

21. A method for treating or preventing an allergic disease, comprising:

a step of administering probiotics; and

a step of administering a polypeptide with a binding ability to IgE.

CLAIMS

1. A pharmaceutical composition for treating or preventing an allergic disease, comprising, as active ingredients, probiotics and a polypeptide with a binding ability to IgE,
wherein the probiotics is any one selected from the group consisting of *B. longum, L. casei, Lc. lactis, S. thermophilus, L. rhamnosus, L. reuteri,* and *L. fermentum,*
wherein the polypeptide with a binding ability to IgE is a polypeptide dimer containing two monomers, each of which contains an extracellular domain of an alpha subunit of an IgE Fc receptor (FcεRIαECD),
the monomer contains a modified Fc region, and
the modified Fc region and the FcεRIαECD are linked via a linker.

2. The pharmaceutical composition for treating or preventing an allergic disease according to claim 1,
wherein the extracellular domain of the alpha subunit of the IgE Fc receptor has the amino acid sequence of SEQ ID NO: 1.

3. The pharmaceutical composition for treating or preventing an allergic disease according to claim 1,
wherein the probiotics are in the form of a dried powder.

4. The pharmaceutical composition for treating or preventing an allergic disease according to claim 1,
wherein the allergic disease is any one selected from the group consisting of food allergy, atopic dermatitis, asthma, allergic rhinitis, allergic conjunctivitis, allergic dermatitis, chronic idiopathic urticaria, and allergic contact dermatitis.

5. A health functional food composition for ameliorating or alleviating an allergic symptom, comprising, as active ingredients, probiotics and a polypeptide with a binding ability to IgE,
wherein the probiotics is any one selected from the group consisting of *B. longum, L.*

casei, Lc. lactis, S. thermophilus, L. rhamnosus, L. reuteri, and *L. fermentum,*
wherein the polypeptide with a binding ability to IgE is a polypeptide dimer containing two monomers, each of which contains an extracellular domain of an alpha subunit of an IgE Fc receptor (FcεRIαECD),
the monomer contains a modified Fc region, and
the modified Fc region and the FcεRIαECD are linked via a linker.

6. A kit for treating or preventing an allergic disease, comprising:
a first composition that contains probiotics; and
a second composition that contains a polypeptide with a binding ability to IgE,
wherein the probiotics is any one selected from the group consisting of *B. longum, L. casei, Lc. lactis, S. thermophilus, L. rhamnosus, L. reuteri,* and *L. fermentum,*
wherein the polypeptide with a binding ability to IgE is a polypeptide dimer containing two monomers, each of which contains an extracellular domain of an alpha subunit of an IgE Fc receptor (FcεRIαECD),
the monomer contains a modified Fc region, and
the modified Fc region and the FcεRIαECD are linked via a linker.

7. The kit for treating or preventing an allergic disease according to claim 18,
wherein the second composition is a composition for subcutaneous or intravenous administration.