Claims

1. *Lactobacillus plantarum LC27* (accession number: KCCM 11801P).

2. The *Lactobacillus plantarum LC27* (accession number: KCCM 11801P) according to claim 1, wherein the *Lactobacillus plantarum LC27* (accession number: KCCM 11801P) having one or more characteristics selected from antioxidant activity, beta-glucuronidase inhibitory activity, lipopolysaccharide (LPS) production inhibitory activity and tight junction protein expression-inducing activity.

3. The *Lactobacillus plantarum LC27* (accession number: KCCM 11801P) according to claim 1, wherein the *Lactobacillus plantarum LC27* (accession number: KCCM 11801P) comprising a 16S rDNA nucleotide sequence represented by SEQ ID NO: 5.

4. A culture of the *Lactobacillus plantarum LC27* (accession number: KCCM 11801P) according to any one of claims 1 to 3.

5. A pharmaceutical composition for preventing or treating one or more diseases selected from a group consisting of intestinal damage, liver injury, allergic disease and inflammatory disease comprising the *Lactobacillus plantarum LC27* (accession number: KCCM 11801P), a culture thereof, a lysate thereof or an extract thereof.

6. The pharmaceutical composition according to claim 5, wherein the pharmaceutical composition further comprising one or more lactic acid bacteria, a culture thereof, a lysate thereof or an extract thereof selected from a group consisting of Lactobacillus brevis CH23 (accession number: KCCM 11762P), Bifidobacterium longum CH57 (accession number: KCCM 11764P), *Lactobacillus plantarum* LC5 (accession number: KCCM 11800P) and *Bifidobacterium*

longum LC67 (accession number: KCCM 11802P).

7. The pharmaceutical composition according to claim 6, wherein the pharmaceutical composition further comprising *Bifidobacterium longum* LC67 (accession number: KCCM 11802P), a culture thereof, a lysate thereof or an extract thereof.

8. The pharmaceutical composition according to claim 5, wherein the intestinal damage is intestinal permeability syndrome.

9. The pharmaceutical composition according to claim 5, wherein the liver injury is selected from a group consisting of hepatitis, fatty liver and liver cirrhosis.

10. The pharmaceutical composition according to claim 5, wherein the allergic disease is selected from a group consisting of atopic dermatitis, asthma, pharyngitis and chronic dermatitis.

11. The pharmaceutical composition according to claim 5, wherein the inflammatory disease is selected from a group consisting of gastritis, gastric ulcer, colitis and arthritis.

12. A food composition for preventing or alleviating one or more diseases selected from a group consisting of intestinal damage, liver injury, allergic disease and inflammatory disease comprising the *Lactobacillus plantarum LC27*, a culture thereof, a lysate thereof or an extract thereof of claim 1.

13. The food composition according to claim 12, wherein the food composition further comprising one or more lactic acid bacteria selected from a group consisting of *Lactobacillus brevis* CH23 (accession number: KCCM 11762P), *Bifidobacterium longum* CH57 (accession number: KCCM 11764P), *Lactobacillus plantarum* LC5 (accession number: KCCM 11800P) and *Bifidobacterium longum* LC67 (accession number: KCCM 11802P).

14. The food composition according to claim 12, wherein the food composition further comprising *Bifidobacterium longum* LC67 (accession number: KCCM 11802P), a culture thereof, a lysate thereof or an extract thereof.

15. The food composition according to claim 12, wherein the intestinal damage is intestinal permeability syndrome.

16. The food composition according to claim 12, wherein the liver injury is selected from a group consisting of hepatitis, fatty liver and liver cirrhosis.

17. The food composition according to claim 12, wherein the allergic disease is selected from a group consisting of atopic dermatitis, asthma, pharyngitis and chronic dermatitis.

18. The food composition according to claim 12, wherein the inflammatory disease is selected from a group consisting of gastritis, gastric ulcer, colitis and arthritis.

19. A lysate of the *Lactobacillus plantarum LC27* (accession number: KCCM 11801P) according to any one of claims 1 to 3.