CLAIMS

1. A method for producing an influenza HA split vaccine which induces *in vivo* production of an antibody that binds to a long alpha helix (LAH) of a HA stem region, the method comprising subjecting an influenza HA split vaccine which has not undergone a formalin treatment to an acidic treatment,

wherein the acidic treatment is performed at a pH of 3.0 to 6.5.

2. The method according to Claim 1, wherein the influenza HA split vaccine also has a protective effect against an antigen-mutated influenza virus.

3. A method for producing an influenza HA split vaccine which induces *in vivo* production of an antibody that binds to a LAH of a HA stem region and which has a protective effect against an antigen-mutated influenza virus, the method comprising subjecting an influenza HA split vaccine which has not undergone a formalin treatment to an acidic treatment,

wherein the acidic treatment is performed at a pH of 3.0 to 6.5.

4. The method of any one of Claims 1 to 3, wherein the acidic treatment is performed at a pH of 4.0 to 6.0.

5. The method of any one of Claims 1 to 4, wherein the acidic treatment is performed at a pH of 4.4 to 5.8.

6. The method of any one of Claims 1 to 5, wherein the influenza HA split

vaccine is of type H3N2 or type H1N1.

7. An influenza HA split vaccine which induces *in vivo* production of an antibody that binds to a LAH of a HA stem region, the vaccine being produced by a method comprising subjecting an influenza HA split vaccine which has not undergone a formalin treatment to an acidic treatment,

wherein the acidic treatment is performed at a pH of 3.0 to 6.5.

8. An influenza HA split vaccine which is produced by a method comprising subjecting an influenza HA split vaccine which has not undergone a formalin treatment to an acidic treatment, induces *in vivo* production of an antibody that binds to a LAH of a HA stem region, and also has a protective effect against an antigen-mutated influenza virus,

wherein the acidic treatment is performed at a pH of 3.0 to 6.5.

9. The influenza HA split vaccine of Claim 7 or 8, wherein the acidic treatment is performed at a pH of 4.0 to 6.0.

10. The influenza HA split vaccine of any one of Claims 7 to 9, wherein the acidic treatment is performed at a pH of 4.4 to 5.8.

11. The influenza HA split vaccine of any one of Claims 7 to 10, wherein the influenza HA split vaccine is of type H3N2 or type H1N1.

12. An agent for protection from infection with influenza, comprising the influenza HA split vaccine of any one of Claims 7 to 11.