CLAIMS

1. A stable antibody-comprising formulation comprising basic amino acid-aspartate or basic amino acid-glutamate, wherein the antibody is an antibody modified to have an isoelectric point (pI) of 5 to 8.

2. The formulation of claim 1 comprising histidine-aspartate buffer or histidine-glutamate buffer, wherein the basic amino acid is histidine.

3. The formulation of claim 1 comprising arginine-aspartate or arginine-glutamate, wherein the basic amino acid is arginine.

4. A stable antibody-comprising formulation comprising histidine-aspartate buffer or histidine-glutamate buffer, and arginine-aspartate or arginine-glutamate, wherein the antibody is an antibody modified to have an isoelectric point (pI) of 5 to 8.

5. A stable antibody-comprising formulation comprising tris(hydroxymethyl)aminomethane-aspartate buffer or tris(hydroxymethyl)aminomethane-glutamate buffer.

6. A stable antibody-comprising formulation comprising tris(hydroxymethyl)aminomethane-aspartate buffer and tris(hydroxymethyl)aminomethane-glutamate buffer.~~:~~

7. The formulation according to any one of claims 1 to 6, which does not substantially comprise chloride ion and acetate ion.

8. The formulation according to any one of claims 1 to 7, which additionally comprises a sugar.

9. The formulation according to any one of claims 1 to 8, wherein the antibody is a humanized antibody or a human antibody.

~~10. The formulation according to any one of claims 1 to 9, wherein the antibody has been modified to have an isoelectric point (pI) of 5 to 8.~~

~~11~~10. The formulation according to any one of claims 1 to ~~10~~9, wherein the antibody concentration is 50 mg/ml or more.

~~12~~11. The formulation according to any one of claims 1 to ~~10~~9, wherein the antibody concentration is 50 to 250 mg/ml.

~~13~~12. The formulation according to any one of claims 1 to ~~12~~11, which is a liquid formulation.

~~14~~13. The formulation according to claim ~~13~~12, wherein the viscosity of the liquid formulation is 30 mPa·s or less.

~~15~~14. The formulation according to claim ~~13~~12 or ~~14~~13, wherein the liquid formulation is stable at 2°C to 8°C for at least six months.

~~16~~15. The formulation according to any one of claims ~~13~~12 to ~~15~~14, which has not been subjected to lyophilization during preparation of the formulation.

~~17~~16. The formulation according to any one of claims ~~13~~12 to ~~16~~15, which is frozen stored at -30°C to -10°C.

~~18~~17. The formulation according to any one of claims 1 to ~~12~~11, wherein the formulation is a lyophilized formulation.

~~19~~18. The formulation according to any one of claims 2, 4, and 7 to ~~18~~17, wherein the buffer concentration is 5 to 100 mM.

~~20~~19. The formulation according to any one of claims 3 and 7 to ~~19~~18, wherein the arginine concentration is 5 to 300 mM.

~~21~~20. The formulation according to any one of claims 1 to ~~20~~19, wherein the antibody is an anti-IL-6 receptor antibody.

~~22~~21. The formulation according to any one of claims 2, 4, and 7 to ~~21~~20, wherein the buffer substantially comprises only amino acid(s).

~~23~~22. The formulation according to any one of claims 1 to ~~22~~21, which is for subcutaneous administration.

~~24~~22. A method for suppressing aggregation formation during frozen storage of a highly-concentrated antibody-comprising formulation by using aspartic acid or glutamic acid as a counter ion species to a buffer in the formulation, wherein the highly concentrated antibody is an antibody modified to have an isoelectric point (pI) of 5 to 8.

~~25~~23. A method for suppressing aggregation formation during liquid storage of a highly-concentrated antibody-comprising formulation by using aspartic acid or glutamic acid as a counter ion species to a buffer in the formulation, wherein the highly concentrated antibody is an antibody modified to have an isoelectric point (pI) of 5 to 8.

~~26~~24. A method for suppressing aggregation formation during frozen storage of a highly-concentrated antibody-comprising formulation by using aspartic acid or glutamic acid as a counter ion species to a stabilizer in the formulation, wherein the highly concentrated antibody is an antibody modified to have an isoelectric point (pI) of 5 to 8.

~~27~~25. A method for suppressing aggregation formation during liquid storage of a highly-concentration antibody-comprising formulation by using aspartic acid or glutamic acid as a counter ion species to a stabilizer in the formulation, wherein the highly concentrated antibody is an antibody modified to have an isoelectric point (pI) of 5 to 8.