What is claimed is:

1. A method for reducing the viscosity of a formulation containing acetate and a therapeutic polypeptide, the method comprising; (a) providing a formulation comprising acetate; and (b) adding glycine and/or arginine to the formulation to a concentration of about 1.0% w/v, wherein the viscosity of the formulation with the glycine and/or arginine is reduced compared to the viscosity of the same formulation without glycine and/or arginine.

2. The method of claim 1, wherein the viscosity of the formulation with glycine and/or arginine is reduced by at least about 5%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, or at least about 30% compared to the viscosity of the formulation in the absence of glycine and/or arginine.

3. The method of claim 1 or 2, wherein the viscosity of the formulation with glycine and/or arginine is less than about 25 cP or less than about 20 cP.

4. A method for reducing the viscosity of a formulation containing acetate and a therapeutic polypeptide, the method comprising; (a) providing a formulation comprising acetate; and (b) adding methionine to the formulation to a concentration of about 0.04% w/v, wherein the viscosity of the formulation with the methionine is reduced compared to the viscosity of the same formulation without methionine.

5. The method of claim 4, wherein the viscosity of the formulation with methionine is reduced by at least about 5%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, or at least about 30% compared to the viscosity of the formulation in the absence of methionine.

6. The method of claim 4 or 5, wherein the viscosity of the formulation with methionine is less than about 25 cP or less than about 20 cP.

7. A method for reducing the viscosity of a formulation containing acetate and a therapeutic polypeptide, the method comprising; (a) providing a formulation comprising acetate; and (b) adding phenylalanine to the formulation to a concentration of about 0.8% w/v, wherein the viscosity of the formulation with the phenylalanine is reduced compared to the viscosity of the same formulation without phenylalanine.

8. The method of claim 7, wherein the viscosity of the formulation with phenylalanine is reduced by at least about 5%, at least about 10%, at least about 15%, at least about 20%, at least about

25%, at least about 30%, at least about 40%, or at least about 50% compared to the viscosity of the formulation in the absence of phenylalanine.

9. The method of claim 7 or 8, wherein the viscosity of the formulation with phenylalanine is less than about 20 cP or less than about 15 cP.

10. A method for reducing the viscosity of a formulation containing acetate and a therapeutic polypeptide, the method comprising; (a) providing a formulation comprising acetate; and (b) adding tryptophan to the formulation to a concentration of about 0.2% w/v, wherein the viscosity of the formulation with the tryptophan is reduced compared to the viscosity of the same formulation without tryptophan.

11. The method of claim 10, wherein the viscosity of the formulation with tryptophan is reduced by at least about 5%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 40%, or at least about 50% compared to the viscosity of the formulation in the absence of tryptophan.

12. The method of claim 10 or 11, wherein the viscosity of the formulation with tryptophan is less than about 20 cP or less than about 15 cP.

13. A method for reducing the viscosity of a formulation containing acetate and a therapeutic polypeptide, the method comprising; (a) providing a formulation comprising acetate; and (b) adding proline to the formulation to a concentration of about 4.0% w/v, wherein the viscosity of the formulation with the proline is reduced compared to the viscosity of the same formulation without proline.

14. The method of claim 13, wherein the viscosity of the formulation with proline is reduced by at least about 5%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, or at least about 30% compared to the viscosity of the formulation in the absence of proline.

15. The method of claim 13 or 14, wherein the viscosity of the formulation with proline is less than about 25 cP or less than about 20 cP.

16. The method of any preceding claim, wherein the method further comprises determining the stability of the protein formulation.

17. The method of any preceding claim, wherein the formulation further comprises sucrose.

18. The method of claim 17, wherein the formulation further comprises sucrose at a concentration of about 234 mM.

19. The method of any preceding claim, wherein the formulation is formulated to a pH of about 5.5.

20. The method of any preceding claim, wherein the formulation further comprises polysorbate-80.

21. The method of any preceding claim wherein the therapeutic protein is an antigen binding polypeptide.

22. The method of any preceding claim wherein the antigen binding polypeptide is an antibody.

23. The method of any preceding claim wherein the antigen binding polypeptide is an immunoglobulin single variable domain.

24. The method of claim 21 where the antigen binding polypeptide binds to interleukin 5 (IL5).

25. The method of claim 24, wherein the antigen binding polypeptide is an anti-IL5 antibody.

26. The method of claim 25, wherein the anti-IL5 antibody comprises a heavy chain comprising SEQ ID NO:1 and a light chain comprising SEQ ID NO:2.

27. The method of any preceding claim wherein the therapeutic protein is present at a concentration of at least about 150 mg/ml, at least about 175 mg/ml, at least about 200 mg/ml, at least about 225 mg/ml, at least about 250 mg/ml, at least about 275 mg/ml, or at least about 300 mg/ml.

28. The method of any preceding claim wherein the therapeutic protein is present at a concentration of at least about 150 mg/ml to about 300 mg/ml.

29. The method of any preceding claim wherein the formulation is a reconstituted formulation.

30. The method of any preceding claim wherein the formulation is a liquid pharmaceutical formulation.

31. The method of any preceding claim wherein the formulation is suitable for parenteral administration.

32. The method of any preceding claim wherein the formulation comprises about 25 mM to about 75 mM acetate.

33. The method of claim 32 wherein the formulation comprises about 55 mM acetate.

34. A stable formulation produced by the method of any preceding claim.

35. An article of manufacture comprising a container containing the formulation of claim 38.

36. The article of manufacture of claim 35 further comprising directions for administration of the formulation.

CLAIMS

1. A method for reducing the viscosity of a formulation containing acetate and a therapeutic polypeptide, the method comprising; (a) providing a formulation comprising acetate; and (b) adding glycine and/or arginine to the formulation to a concentration of 1.0% w/v, wherein the viscosity of the formulation with the glycine and/or arginine is reduced compared to the viscosity of the same formulation without glycine and/or arginine wherein the therapeutic polypeptide is an antigen binding polypeptide and where the antigen binding polypeptide binds to an anti-interleukin 5 (IL5).

2. The method of claim 1, wherein the viscosity of the formulation with glycine and/or arginine is reduced by at least 5%, at least 10%, at least 15%, at least 20%, at least 25%, or at least 30% compared to the viscosity of the formulation in the absence of glycine and/or arginine.

3. The method of claim 1 or claim 2, wherein the viscosity of the formulation with glycine and/or arginine is less than 25 cP or less than 20 cP.

4. The method of any preceding claim, wherein the method further comprises determining the stability of the protein formulation.

5. The method of any preceding claim, wherein the formulation further comprises sucrose.

6. The method of claim 5, wherein the formulation further comprises sucrose at a concentration of 234 mM.

7. The method of any preceding claim, wherein the formulation is formulated to a pH of 5.5.

8. The method of any preceding claim, wherein the formulation further comprises polysorbate-80.

9. The method of any preceding claim, wherein the antigen binding polypeptide is an antibody.

10. The method of any preceding claim, wherein the antigen binding polypeptide is an immunoglobulin single variable domain.

11. The method of claim 1, wherein the anti-IL5 antibody comprises a heavy chain comprising SEQ ID NO:1 and a light chain comprising SEQ ID NO:2.

12. The method of any preceding claim, wherein the therapeutic protein is present at a concentration of at least 150 mg/ml, at least 175 mg/ml, at least 200 mg/ml, at least 225 mg/ml, at least 250 mg/ml, at least 275 mg/ml, or at least 300 mg/ml.

13. The method of any preceding claim, wherein the therapeutic protein is present at a concentration of at least 150 mg/ml to 300 mg/ml.

14. The method of any preceding claim, wherein the formulation is a reconstituted formulation.

15. The method of any preceding claim, wherein the formulation is a liquid pharmaceutical formulation.

16. The method of any preceding claim, wherein the formulation is suitable for parenteral administration.

17. The method of any preceding claim, wherein the formulation comprises 25 mM to 75 mM acetate.

18. The method of claim 17, wherein the formulation comprises 55 mM acetate.

19. A stable formulation produced by the method of any preceding claim.

20. An article of manufacture comprising a container containing the formulation of claim 19.

21. The article of manufacture of claim 20, further comprising directions for administration of the formulation.