

-continued

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What is claimed is:

1. A stable liquid aqueous pharmaceutical formulation comprising: a human anti-human Tumor Necrosis Factor alpha (TNF α) IgG1 antibody at a concentration of 45 to 105 mg/ml, wherein the antibody is D2E7, and a buffer system; wherein the formulation is isotonic, suitable for single-use subcutaneous injection, and has a pH of 4 to 8.

2. The formulation of claim 1, wherein the buffer system comprises an organic acid.

3. The formulation of claim 2, wherein the organic acid is selected from the group consisting of succinate, acetate, and histidine.

4. The formulation of claim 2, wherein the pH is 4.5 to 6.0.

5. The formulation of claim 2, wherein the formulation comprises a surfactant.

6. The formulation of claim 5, wherein the surfactant is a polysorbate.

7. The formulation of claim 6, wherein the polysorbate is polysorbate-80.

8. The formulation of claim 2, wherein the formulation comprises a tonicity agent.

9. The formulation of claim 8, wherein the tonicity agent is a polyol.

10. The formulation of claim 9, wherein the polyol is a sugar, a sugar alcohol or a sugar acid.

11. The formulation of claim 10, wherein the sugar is trehalose.

12. The formulation of claim 10, wherein the sugar is sucrose.

13. The formulation of claim 10, wherein the sugar alcohol is sorbitol.

14. The formulation of claim 10, wherein the sugar alcohol is mannitol.

15. The formulation of claim 10, wherein the formulation comprises a surfactant.

16. The formulation of claim 15, wherein the surfactant is a polysorbate.

17. The formulation of claim 16, wherein the polysorbate is polysorbate-80.

18. The formulation of claim 17, wherein the sugar is trehalose.

19. The formulation of claim 18, wherein the buffer system comprises succinate, acetate, or histidine.

20. The formulation of claim 17, wherein the sugar is sucrose.

21. The formulation of claim 20, wherein the buffer system comprises succinate, acetate, or histidine.

22. The formulation of claim 17, wherein the sugar alcohol is sorbitol.

23. The formulation of claim 22, wherein the buffer system comprises succinate, acetate, or histidine.

24. The formulation of claim 17, wherein the sugar alcohol is mannitol.

25. The formulation of claim 24, wherein the buffer system comprises succinate, acetate, or histidine.

26. The formulation of claim 17, wherein the buffer system comprises succinate, acetate, or histidine.

27. The formulation of claim 17, wherein the polysorbate 80 concentration is between 0.1 and 10 mg/ml.

28. The formulation of claim 1, wherein the formulation comprises a preservative.

29. The formulation of claim 1, wherein the formulation comprises a chelating agent.

30. The formulation of claim 1, wherein the formulation comprises an antioxidant.

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