CLAIMS

What is claimed is:

1. A method for reducing reconstitution time of a lyophilized antibody composition, the method comprising: (a) preparing a liquid composition comprising the antibody and a sugar at a molar ratio of sugar:antibody of at least about 360:1, (b) adding tert-butyl alcohol (TBA) to the liquid composition to form a liquid antibody/TBA mixture, wherein the amount of TBA in the liquid antibody/TBA mixture is about 5%-6% by volume, (c) freezing the liquid antibody/TBA mixture, (d) lyophilizing the liquid antibody/TBA mixture to form a lyophilized antibody composition, (e) reconstituting the lyophilized antibody composition with a diluent, wherein the time for reconstituting the antibody lyophilized in the presence of TBA is less than the time for reconstituting the same amount of the same antibody lyophilized in the absence of TBA.
2. The method of claim 1, wherein the amount of TBA in the liquid antibody/TBA mixture is about 5% by volume.
3. The method of claim 1, wherein the molar ratio of sugar:antibody is between about 360:1 to about 500:1.
4. The method of claim 1, wherein TBA is added to the liquid composition comprising the antibody immediately prior to freezing the liquid antibody/TBA mixture.
5. The method of claim 1, wherein the antibody is a full length antibody.
6. The method of claim 1, wherein the concentration of the antibody in the liquid composition comprising the antibody is between about 10 mg/ml to about 250 mg/ml, between about 25 mg/ml to about 250 mg/ml, about 50 mg/ml to about 250 mg/ml, about 100 mg/ml to about 250 mg/ml, about 150 mg/mml to about 250 mg/ml, about

25 mg/ml to about 100 mg/ml, about 50 mg/ml to about 100 mg/ml, about 25 mg/ml to about 125 mg/ml, or about 50 mg/ml to about 125 mg/ml.

7. The method of claim 1, wherein the amount of the antibody in the liquid composition comprising the antibody is between about 150 mg-11 grams.

8. The method of claim 1, wherein the sugar is sucrose or trehalose.

9. The method of claim 1, wherein the liquid antibody/TBA mixture is lyophilized in a glass vial.

10. The method of claim 9, wherein the glass vial is a 6cc vial, a 10cc vial, a 15cc vial, a 20cc vial, a 25cc vial, a 50cc vial, or a 100 cc vial.

11. The method of claim 9, wherein the glass vial has a fill volume of 2.5 ml, 25 ml, 50 ml, or 100 ml.

12. The method of claim 1, wherein the time for reconstituting the lyophilized antibody composition which was lyophilized in the presence of TBA is reduced by about 40-95% compared to the time for reconstituting the same amount of the same antibody composition lyophilized in the absence of TBA.

13. The method of claim 1, wherein the time for reconstituting the lyophilized antibody composition which was lyophilized in the presence of TBA is reduced by about 50%, by about 60%, by about 70%, by about 80%, by about 90%, or by about 95% compared to the time for reconstituting the same amount of the same antibody composition lyophilized in the absence of TBA.

14. The method of claim 1, wherein the time for reconstituting the lyophilized antibody composition which was lyophilized in the presence of TBA is reduced by about 50-60%, by about 60-70%, by about 70-80%, by about 80-90%, or by about 90-95% compared to the time for reconstituting the same amount of the same antibody composition lyophilized in the absence of TBA.

15. The method of claim 1, wherein reconstituting the lyophilized antibody composition is performed under conditions in which the lyophilized antibody composition is under a vacuum.

16. The method of claim 15, wherein the vacuum is less than 100 Torr, less than 50 Torr, or between 100 mTorr and 50 Torr.

17. The method of claim 15, wherein the vacuum is 100 mTorr.

18. The method of claim 1, wherein reconstituting the lyophilized antibody compositing is performed using a shaker.

19. A liquid antibody formulation suitable for lyophilization, wherein the formulation comprises the antibody, a sugar, a diluent, and TBA, wherein the amount of TBA in the liquid formulation is about 5%-6% by volume, wherein the amount of sugar in the liquid formulation is at a molar ratio of sugar:antibody of at least about 360:1, and wherein the time for reconstituting the antibody lyophilized in the presence of TBA is less than the time for reconstituting the same amount of the same antibody lyophilized in the absence of TBA.

20. The liquid antibody formulation of claim 19, wherein the amount of TBA in the liquid composition is about 5% by volume.

21. A lyophilized antibody composition, wherein the lyophilized antibody composition is produced by preparing a liquid composition comprising the antibody and a sugar at a molar ratio of sugar:antibody of at least about 360:1, adding tert-butyl alcohol (TBA) to the liquid composition to form a liquid antibody/TBA mixture, wherein the amount of TBA in the liquid formulation is about 5%-6% by volume, freezing the liquid antibody/TBA mixture, lyophilizing the liquid antibody/TBA mixture to form a lyophilized antibody composition, wherein upon reconstitution of the lyophilized antibody composition with a diluent, the time for reconstituting the antibody

lyophilized in the presence of TBA is less than the time for reconstituting the same amount of the same antibody lyophilized in the absence of TBA.

22. The lyophilized antibody formulation of claim 21, wherein the amount of TBA in the liquid composition is about 5% by volume.