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 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 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 5% by volume.
3. The method of claim 1, wherein the molar ratio of sugar:antibody is between 360:1 to 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 10 mg/ml to 250 mg/ml, between 25 mg/ml to 250 mg/ml, 50 mg/ml to 250 mg/ml, 100 mg/ml to 250 mg/ml, 150 mg/mml to 250 mg/ml, 25 mg/ml to 100 mg/ml, 50 mg/ml to 100 mg/ml, 25 mg/ml to 125 mg/ml, or 50 mg/ml to 125 mg/ml.

7. The method of claim 1, wherein the amount of the antibody in the liquid composition comprising the antibody is between 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 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 50%, by 60%, by 70%, by 80%, by 90%, or by 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 50-60%, by 60-70%, by 70-80%, by 80-90%, or by 90-95% compared to the time for reconstituting the same amount of the same antibody composition lyophilized in the absence of TBA.~~

~~15.~~12. 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.~~13. The method of claim ~~15~~12, wherein the vacuum is less than 100 Torr, less than 50 Torr, or between 100 mTorr and 50 Torr.

~~17.~~14. The method of claim ~~15~~12, wherein the vacuum is 100 mTorr.

~~18.~~15. The method of claim 1, wherein reconstituting the lyophilized antibody ~~compositing~~ composition is performed using a shaker.

~~19.~~16. 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 5%-6% by volume, wherein the amount of sugar in the liquid formulation is at a molar ratio of sugar:antibody of at least 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.~~17. The liquid antibody formulation of claim ~~19~~16, wherein the amount of TBA in the liquid composition is 5% by volume.

~~21.~~18. 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 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 5%-6% by volume, freezing the liquid antibody/TBA mixture, and 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.~~19. The lyophilized antibody composition of claim ~~21~~18, wherein the amount of TBA in the liquid composition is 5% by volume.