What is claimed is:

1. A crystal of an anti-sclerostin IgG antibody comprising light and heavy chain variable regions of SEQ ID NOS: 3 and 5, preferably having the amino acid sequences of SEQ ID NOS: 13 and 15.

2. A sterile formulation comprising a crystal of an anti-sclerostin IgG antibody, wherein at least 70% of the antibody is in a crystalline form.

3. A sterile formulation comprising a crystal of an anti-sclerostin IgG antibody, wherein at least 90% of the antibody is in a crystalline form.

4. The formulation of claim 2 or claim 3, wherein the IgG antibody comprises light and heavy chain variable regions of SEQ ID NOS: 3 and 5, preferably having the amino acid sequences of SEQ ID NOS: 13 and 15.

5. The crystal or formulation of any of the preceding claims, wherein the crystal has a length of up to about 500 μm.

6. The crystal or formulation of any one of the preceding claims, wherein the crystal has a shape selected from the group consisting of ellipsoids, rods and needles.

7. The formulation of any one of the preceding claims, comprising crystals having a length of up to 500 μm and a shape selected from the group consisting of ellipsoids, rods and needles or mixtures thereof.

8. The crystal or formulation of any one of the preceding claims, wherein the crystal comprises a salt selected from the group consisting of sodium dihydrogen phosphate, di-potassium hydrogen phosphate, sodium chloride, ammonium sulfate, potassium sodium tartrate tetrahydrate, tacsimate, sodium citrate dihydrate, sodium acetate trihydrate, di-ammonium tartrate, sodium malonate, acetate, calcium acetate, cacodylate, CHES, lithium sulfate, magnesium chloride, zinc acetate, cesium chloride, ammonium phosphate, sodium phosphase, potassium phosphate, sodium fluoride, potassium iodide, sodium idodide, ammonium iodide, sodium thiocyanate, potassium thiocyanate, sodium formate, potassium formate and ammonium formate.

9. The formulation of any of the preceding claims, that is a lyophilized formulation.

10. The formulation of any of the preceding claims, that is a liquid formulation.

11. The formulation of claim 10, comprising a concentration of at least about 100 mg of said antibody per ml of formulation.

12. The formulation of claim 10, comprising at least about 140 mg of antibody dispersed in 1.5 ml or less of liquid.

13. The formulation of claim 11 or claim 12 that is injectable through a syringe having a 20 Gauge needle or finer using a clinically acceptable amount of force.

14. The formulation of any of the preceding claims, that retains at least 50% of the *in vivo* activity, when given at the same dose and in the same manner, of a liquid formulation of said antibody that has not been crystallized.

15. The formulation of claim 11 or 12, that, when administered to a mammalian subject, mediates an increase in bone mineral density that is at least about 70% of the level of bone mineral density increase mediated by a liquid formulation of said antibody that has not been crystallized, wherein the formulation and the liquid formulation of the antibody that has not been crystallized is administered to the subject at the same dose and in the same manner.

16. The formulation of claim 14 or 15, that is administered as a single dose.

17. The formulation of claim 14 or 15, that is administered in multiple doses.

18. A container comprising at least 50 mg of the antibody crystal of claim 1 for suspension in a volume of 0.5-2 mL.

19. A container comprising the formulation of claim 2 or claim 3.

20. The container of claim 18 or 19, wherein the container is a vial, syringe or injection device.

21. The container of claim 20, wherein the syringe needle is 20 Gauge or finer.

22. A method of resuspending the formulation of claim 9, comprising contacting the formulation with about 0.5-2 mL of a sterile suspension vehicle.

23. The method of claim 22, wherein the suspension vehicle is selected from the group consisting of glutamate, sorbitol, HEPES, dextrose and water or combinations thereof.

24. A method of making a crystal of an anti-sclerostin IgG antibody comprising light and heavy chain variable regions of SEQ ID NOS: 3 and 5, preferably having the amino acid sequences of SEQ ID NOS: 13 and 15, the method comprising combining a solution of the antibody with a crystallization reagent comprising a salt selected from the group

consisting of sodium dihydrogen phosphate, di-potassium hydrogen phosphate, sodium chloride, ammonium sulfate, ammonium acetate, potassium sodium tartrate tetrahydrate, tacsimate, sodium citrate dihydrate, sodium acetate trihydrate, di-ammonium tartrate, sodium malonate, acetate, calcium acetate, cacodylate, CHES, lithium sulfate, lithium acetate dihydrate, magnesium chloride, magnesium acetate tetrahydrate, magnesium formate, magnesium nitrate, magnesium sulfate, zinc acetate, zinc chloride, zinc sulfate, cesium chloride, ammonium phosphate, sodium phosphase, potassium phosphate, sodium fluoride, potassium iodide, sodium idodide, ammonium iodide, sodium thiocyanate, potassium thiocyanate, sodium formate, potassium formate and ammonium formate, optionally at pH of about 6 to about 8, such that a crystal is formed.

25. The method of claim 24, wherein the concentration of the salt is from about 0.1 M to about 10 M.

26. A method of making a crystal of an anti-sclerostin IgG antibody comprising light and heavy chain variable regions of SEQ ID NOS: 3 and 5, preferably having the amino acid sequences of SEQ ID NOS: 13 and 15, the method comprising combining a solution of the antibody with a crystallization reagent comprising succinic acid, PEG-1000, PEG-8000 or isopropanol such that a crystal is formed.

27. The method of claim 24 or claim 26, wherein at least 80% of the antibody is crystallized.

28. The method of claim 24 or claim 26 that is a batch crystallization method.

29. The method of claim 26, wherein the crystallization reagent comprises

(a) from about 0.1 M to about 5 M succinic acid, from about 0.1 M to about 5 M HEPES and from about 0.1 % (w/v) to about 60% (w/v) polyethylene glycol monomethyl ether 2000;

(b) from about 1% (w/v) to about 50% (w/v) PEG-8000, from about 0.05 M to about 5 M imidazole and from about 0.1 M to about 5 M calcium acetate;

(c) from about 10% to about 80% (w/v) PEG-1000, from about 0.05 M to about 5 M sodium/potassium phosphate and from about 0.05 M to about 5 M sodium chloride;

(d) from about 1% (w/v) to about 20% (w/v) PEG-8000, from about 0.05 M to about 5 M cacodylate, from about 0.1 M to about 2 M calcium acetate, and from about 10% to about 30% (w/v) glycerol; or

(e) from about 10% to about 30% isopropanol and from about 0.1 M to about 2 M sodium/potassium phosphate.

30. An antibody crystal produced by the method of claim 24 or claim 26.

31. Use of the formulation of any one of claims 2-17 in the manufacture of a medicament for increasing bone mineral density, treating a disorder associated with decreased bone density, treating a bone-related disorder, or improving outcomes in a procedure, replacement, graft, surgery or repair in a mammalian subject, wherein said formulation is to be provided in an amount effective to increase bone mineral density in the subject.

What is claimed is:

1. A sterile formulation comprising a crystal of an anti-sclerostin IgG antibody comprising IgG antibody comprising light and heavy chain variable regions of SEQ ID NO: 3 and 5, wherein at least 80% of the antibody is in a crystalline form.

2. A sterile formulation comprising a crystal of an anti-sclerostin IgG antibody comprising IgG antibody comprising light and heavy chain variable regions of SEQ ID NO: 3 and 5, wherein at least 90% of the antibody is in a crystalline form.

3. The formulation of claim 1 or claim 2, wherein the IgG antibody comprises l the amino acid sequences of SEQ ID NOS: 13 and 15.

4. The formulation of any of the preceding claims, wherein the crystal has a length of up to about 500 μm.

5. The formulation of any one of the preceding claims, wherein the crystal has a shape selected from the group consisting of ellipsoids, rods and needles.

6. The formulation of any one of the preceding claims, comprising crystals having a length of up to 500 μm and a shape selected from the group consisting of ellipsoids, rods and needles or mixtures thereof.

7. The formulation of any one of the preceding claims, wherein the crystal comprises a salt selected from the group consisting of sodium dihydrogen phosphate, di-potassium hydrogen phosphate, sodium chloride, ammonium sulfate, potassium sodium tartrate tetrahydrate, tacsimate, sodium citrate dihydrate, sodium acetate trihydrate, di-ammonium tartrate, sodium malonate, acetate, calcium acetate, cacodylate, CHES, lithium sulfate, magnesium chloride, zinc acetate, cesium chloride, ammonium phosphate, sodium phosphase, potassium phosphate, sodium fluoride, potassium iodide, sodium idodide, ammonium iodide, sodium thiocyanate, potassium thiocyanate, sodium formate, potassium formate and ammonium formate.

8. The formulation of any of the preceding claims, that is a lyophilized formulation.

9. The formulation of any of the preceding claims, that is a liquid formulation.

10. The formulation of claim 9, comprising a concentration of at least about 100 mg of said antibody per ml of formulation.

11. The formulation of claim 9, comprising at least about 140 mg of antibody dispersed in 1.5 ml or less of liquid.

12. The formulation of claim 10 or claim 11 that is injectable through a syringe having a 20 Gauge needle or finer using a clinically acceptable amount of force.

13. The formulation of any of the preceding claims, that retains at least 50% of the *in vivo* activity, when given at the same dose and in the same manner, of a liquid formulation of said antibody that has not been crystallized.

14. A container comprising the formulation of claim 1 or claim 2.

15. The container of claim 14, wherein the container is a vial, syringe or injection device.

16. The container of claim 15, wherein the syringe needle is 20 Gauge or finer.

17. A method of resuspending the formulation of claim 8, comprising contacting the formulation with about 0.5-2 mL of a sterile suspension vehicle.

18. The method of claim 17, wherein the suspension vehicle is selected from the group consisting of glutamate, sorbitol, HEPES, dextrose and water or combinations thereof.

19. A method of making a crystal of an anti-sclerostin IgG antibody comprising light and heavy chain variable regions of SEQ ID NOS: 3 and 5, the method comprising combining a solution of the antibody with a crystallization reagent comprising a salt selected from the group consisting of sodium dihydrogen phosphate, di-potassium hydrogen phosphate, sodium chloride, ammonium sulfate, ammonium acetate, potassium sodium tartrate tetrahydrate, tacsimate, sodium citrate dihydrate, sodium acetate trihydrate, di-ammonium tartrate, sodium malonate, acetate, calcium acetate, cacodylate, CHES, lithium sulfate, lithium acetate dihydrate, magnesium chloride, magnesium acetate tetrahydrate, magnesium formate, magnesium nitrate, magnesium sulfate, zinc acetate, zinc chloride, zinc sulfate, cesium chloride, ammonium phosphate, sodium phosphase, potassium phosphate, sodium fluoride, potassium iodide, sodium idodide, ammonium iodide, sodium thiocyanate, potassium thiocyanate, sodium formate, potassium formate and ammonium formate, optionally at pH of about 6 to about 8, such that a crystal is formed.

20. The method of claim 19, wherein the concentration of the salt is from about 0.1 M to about 10 M.

21. A method of making a crystal of an anti-sclerostin IgG antibody comprising light and heavy chain variable regions of SEQ ID NOS: 3 and 5, the method comprising combining a solution of the antibody with a crystallization reagent comprising succinic acid, PEG-1000, PEG-8000 or isopropanol such that a crystal is formed.

22. The method of claim 19 or claim 21, wherein at least 90% of the antibody is crystallized.

23. The method of claim 19 or claim 21 that is a batch crystallization method.

24. The method of claim 21, wherein the crystallization reagent comprises

(a) about 1 M succinic acid, about 0.1 M HEPES and about 1% (w/v) polyethylene glycol monomethyl ether 2000;

(b) about 10% (w/v) PEG-8000, about 0.1 M imidazole and about 0.2 M calcium acetate;

(c) about 20% (w/v) PEG-1000, about 0.1 M sodium/potassium phosphate and about 0.2 M sodium chloride;

(d) about 14.4% (w/v) PEG-8000, about 0.08 M cacodylate, about 0.16 M calcium acetate, and about 20% (w/v) glycerol; or

(e) about 19.9% isopropanol and about 0.2 M sodium/potassium phosphate.

25. An antibody crystal produced by the method of claim 19 or claim 21.

26. Use of the formulation of any one of claims 1-13 in the manufacture of a medicament for increasing bone mineral density, treating a disorder associated with decreased bone density, treating a bone-related disorder, or improving outcomes in a procedure, replacement, graft, surgery or repair in a mammalian subject, wherein said formulation is to be provided in an amount effective to increase bone mineral density in the subject.

27. The method according to claim 19 or claim 21, wherein the antibody comprises the amino acid sequences of SEQ ID NOs: 13 and 15.