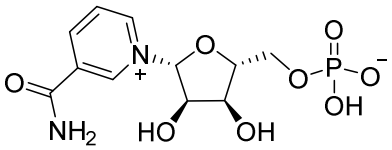
Claims:

1. A crystalline Form 1 of a compound having the structure of formula (I),



(I);

wherein the crystalline Form 1~~compound~~ is anhydrous and has 2θ values 20.03; 20.14; 21.83; and 25.73.

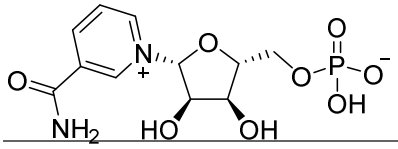
2. The crystalline Form 1~~compound~~ of claim 1, having 2θ values 20.03; 20.14; 21.03; 21.83; 23.08; 23.39; 25.73; and 26.59.

3. The crystalline Form 1~~compound~~ of claim 2, having 2θ values 7.70; 11.54; 12.64; 16.03; 18.99; 20.03; 20.14; 20.83; 21.03; 21.83; 23.08; 23.39; 25.48; 25.73; 26.59; and 29.78.

4. The crystalline Form 1~~compound~~ of claim 3, having 2θ values 7.70; 9.95; 11.54; 12.64; 16.03; 18.18; 18.99; 19.16; 19.44; 20.03; 20.14; 20.83; 21.03; 21.83; 22.44; 23.08; 23.39; 23.89; 24.08; 24.53; 24.68; 25.05; 25.48; 25.73; 26.08; 26.59; 27.33; 27.67; 29.78; and 29.92.

5. The crystalline Form 1~~compound~~ of claim 4, having an XRD pattern substantially as shown in FIG. 1, labeled Form 1.

~~6. A crystalline compound having the structure of formula (I),~~



~~(I);~~

~~wherein the compound is a dimethylsulfoxide solvate and has 2θ values 8.29; 17.39; 19.54; 22.78; and 22.98.~~

~~7. The crystalline compound of claim 6, having 2θ values 8.29; 17.39; 19.54; 19.74; 20.98; 21.58; 22.03; 22.78; 22.98; and 25.53.~~

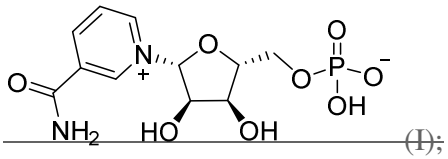
~~8. The crystalline compound of claim 7, having 2θ values 8.29; 16.10; 17.39; 19.24; 19.54; 19.74; 20.33; 20.78; 20.98; 21.18; 21.58; 22.03; 22.78; 22.98; 25.53; 28.48; and 29.48.~~

~~9. The crystalline compound of claim 8, having 2θ values 8.29; 13.12; 15.79; 16.10; 16.69; 17.39; 19.03; 19.24; 19.54; 19.74; 20.33; 20.78; 20.98; 21.18; 21.58; 22.03; 22.78; 22.98; 23.95; 24.14; 24.48; 24.64; 25.14; 25.53; 25.87; 26.89; 27.18; 27.67; 28.02; 28.13; 28.48; 28.98; 29.34; 29.48; and 29.92.~~

~~10. The crystalline salt of claim 9, having an XRD pattern substantially as shown in FIG. 1, labeled Form 2.~~

~~11~~6. A pharmaceutical composition comprising the crystalline Form 1~~salt~~ of any one of claims 1-~~10~~ 5 and one or more pharmaceutically acceptable excipients.

~~12. A method for preparing a crystalline compound having the structure of formula (I):~~



~~(I);~~

~~comprising:~~

~~a) providing a mixture of a compound of formula (I) in a solvent; and~~

~~b) crystallizing the compound of formula (I) from the mixture comprising the compound of formula (I).~~

~~13. The method of claim 12, wherein the crystalline compound is anhydrous.~~

~~14. The method of claim 12, wherein the crystalline compound is a solvate.~~

~~15. The method of claim 14, wherein the solvate is a dimethylsulfoxide solvate.~~

~~16. The method of claim 12, wherein the solvent is methanol or water.~~

~~17. The method of claim 15, wherein the solvent is dimethylsulfoxide.~~

~~18. The method of any one of claims 12-17, wherein the mixture comprising the compound of formula (I) is a solution, and the step of crystallizing the compound of formula (I) from the mixture comprises bringing the solution to supersaturation to cause the compound of formula (I) to precipitate out of solution.~~

~~19. The method of claim 18, wherein the step of bringing the solution to supersaturation comprises slowly adding an anti-solvent, allowing the solution to cool, reducing the volume of the solution, or any combination thereof.~~

~~20. The method of claim 18, wherein the step of bringing the solution to supersaturation comprises cooling the solution to ambient temperature or lower.~~

~~21. The method of any one of claims 12-17, wherein the mixture comprising the compound of formula (I) is a slurry.~~

~~22. The method of any one of claims 12-21, further comprising isolating the crystalline compound.~~

~~23. The method of claim 22, wherein isolating the crystalline compound comprises filtering the crystallized compound from the mixture.~~

~~24. The method of claim 22 or claim 23, further comprising drying the crystalline compound under reduced pressure.~~

~~25. The method of any one of claims 12-24, wherein the crystalline compound is the crystalline compound of any one of claims 1-10.~~