CLAIMS

1. A method of making a water-soluble aspirin-theanine cocrystal composition comprising the steps of:

providing a quantity of acetylsalicylic acid;

adding a quantity of an enantiomer of theanine to said quantity of acetylsalicylic acid to form a mixture comprising said quantity of acetylsalicylic acid and said enantiomer of theanine;

dissolving said mixture in a quantity of a first solvent to form a solution; and

drying said solution for a length of time sufficient to produce a dried crystalline mass.

2. The method of claim 1, characterized in that said quantity of acetylsalicylic acid comprises about 50% by weight of said mixture of said quantity of acetylsalicylic acid and said quantity of a theanine enantiomer.

3. The method of claim 1, characterized in that said dried crystalline mass has an aqueous solubility of at least about 9.4 mg/mL.

4. The method of claim 1, further comprising adding a sugar alcohol to said solution.

5. The method of claim 4, characterized in that said sugar alcohol has a configuration selected from the group consisting of the L-configuration and the D-configuration.

6. The method of claim 1, characterized in that said composition is used to improve a physical property of an active pharmaceutical ingredient, characterized in that said property is selected from the group consisting of solubility, stability, and dissolution rate.

7. The method of claim 1, characterized in that said theanine enantiomer further comprises a carbohydrate functional group thereon.

8. The method of claim 7, characterized in that said carbohydrate functional group has a configuration selected from the group consisting of the L-configuration and the D-configuration.

9. The method of claim 7, characterized in that said carbohydrate functional group is selected from the group consisting of monosaccharides, disaccharides, trisaccharides, oligosaccharides and polysaccharides.

10. The method of claim 1, characterized in that said theanine enantiomer further comprises an amino acid functional group thereon.

11. The method of claim 10, characterized in that said amino acid functional group is a dipeptide.

12. The method of claim 1, characterized in that said theanine enantiomer further comprises an amino acid scaffold thereon selected from the group consisting of glutamine and glutamic acid.

13. The method of claim 1, characterized in that said theanine enantiomer is selected from the group consisting of L-theanine, D-theanine, and DL-theanine.

14. The method of claim 1, characterized in that said theanine enantiomer has a carbohydrate functional group linked thereto.

15. The method of claim 14, characterized in that said carbohydrate functional group has a configuration selected from the group consisting of the L-configuration and the D-configuration.

16. The method of claim 14, characterized in that said carbohydrate functional group is selected from the group consisting of monosaccharides, disaccharides, trisaccharides, oligosaccharides and polysaccharides.

17. The method of claim 1, characterized in that said theanine enantiomer has an amino acid functional group linked thereto.

18. The method of claim 17, characterized in that said amino acid functional group is a dipeptide.

19. The method of claim 1, characterized in that said theanine enantiomer has an amino acid scaffold linked thereto selected from the group consisting of glutamine and glutamic acid.

20. A method of making a water-soluble aspirin-theanine cocrystal composition comprising the steps of:

providing a quantity of acetylsalicylic acid;

adding a quantity of an enantiomer of theanine to said quantity of acetylsalicylic acid to form a mixture comprising said quantity of acetylsalicylic acid and said enantiomer of theanine;

dissolving said mixture in a quantity of water to form a solution; and

drying said solution for a length of time sufficient to produce a dried crystalline mass.

CLAIMS

1. A method of making a water-soluble aspirin-theanine cocrystal composition comprising the steps of:

providing a quantity of acetylsalicylic acid;

adding a quantity of an enantiomer of theanine to said quantity of acetylsalicylic acid to form a mixture comprising said quantity of acetylsalicylic acid and said enantiomer of theanine;

dissolving said mixture in a quantity of a first solvent to form a solution; and

drying said solution for a length of time sufficient to produce a dried crystalline mass.

2. The method of claim 1, characterized in that said quantity of acetylsalicylic acid comprises about 50% by weight of said mixture of said quantity of acetylsalicylic acid and said quantity of a theanine enantiomer.

3. The method of claim 1, characterized in that said dried crystalline mass has an aqueous solubility of at least 9.4 mg/mL.

4. The method of claim 1, further comprising adding a sugar alcohol to said solution.

5. The method of claim 4, characterized in that said sugar alcohol has a configuration selected from the group consisting of the L-configuration and the O-configuration.

6. The method of claim 1, characterized in that said composition is used to improve a physical property of an active pharmaceutical ingredient, characterized in that said property is selected from the group consisting of solubility, stability, and dissolution rate.

7. The method of claim 1, characterized in that said theanine enantiomer further comprises a carbohydrate functional group thereon.

8. The method of claim 7, characterized in that said carbohydrate functional group has a configuration selected from the group consisting of the L-configuration and the D-configuration.

9. The method of claim 7, characterized in that said carbohydrate functional group is selected from the group consisting of monosaccharides, disaccharides, trisaccharides, oligosaccharides and polysaccharides.

10. The method of claim 1, characterized in that said theanine enantiomer further comprises an amino acid functional group thereon.

11. The method of claim 10, characterized in that said amino acid functional group is a dipeptide.

12. The method of claim 1, characterized in that said theanine enantiomer further comprises an amino acid scaffold thereon selected from the group consisting of glutamine and glutamic acid.

13. The method of claim 1, characterized in that said theanine enantiomer is selected from the group consisting of L-theanine, and D-theanine.

14. The method of claim 1, characterized in that said theanine enantiomer has a carbohydrate functional group linked thereto.

15. The method of claim 14, characterized in that said carbohydrate functional group has a configuration selected from the group consisting of the L-configuration and the D-configuration.

16. The method of claim 14, characterized in that said carbohydrate functional group is selected from the group consisting of monosaccharides, disaccharides, trisaccharides, oligosaccharides and polysaccharides.

17. The method of claim 1, characterized in that said theanine enantiomer has an amino acid functional group linked thereto.

18. The method of claim 17, characterized in that said amino acid functional group is a dipeptide.

19. The method of claim 1, characterized in that said theanine enantiomer has an amino acid scaffold linked thereto selected from the group consisting of glutamine and glutamic acid.