

Claims

1. A composition comprising one or more active serine proteases extracted from the ripe fruit of the *Carica papaya* plant.
2. A composition comprising an active serine protease having a contiguous amino acid sequence and at least 95% homology to amino acids 118 to 763 of SEQ ID NO:1.
3. A composition comprising an active serine protease having a contiguous amino acid sequence and at least 95% homology to amino acids 142 to 618 of SEQ ID NO:1.
4. A composition comprising a mixture of one or more active serine proteases and one or more active cysteine proteases extracted from the ripe fruit of the *Carica papaya* plant.
5. A process for preparing a composition comprising an active serine protease, wherein the method comprises treating pulped ripe fruit of the *Carica papaya* plant with an alkali, without subjecting the pulp to a heating step.
6. The process according to claim 5, wherein the alkali is a weak alkali.
7. The process according to claim 6, wherein the weak alkali has a pKa of less than 11.
8. The process according to claim 7, wherein the weak alkali is sodium bicarbonate.
9. The process according to any one of claims 5 to 8, wherein the composition further comprises an active cysteine protease.
10. The process according to any one of claims 5 to 9, wherein soluble protease is separated from insoluble plant material after the alkali treatment.
11. The process according to any one of claims 5 to 10, wherein the composition is further treated to increase the concentration of the protease or proteases.
12. A composition comprising an active serine protease obtainable by the process of any one of claims 5 to 11.

13. A pharmaceutical composition comprising an active *Carica papaya* serine protease together with a pharmaceutically acceptable carrier or diluent.
14. A pharmaceutical composition comprising a composition according to any one of claims 1 to 4 and 12, together with a pharmaceutically acceptable carrier or diluent.
15. A cosmetic composition comprising comprising an active *Carica papaya* serine protease together with a cosmetically acceptable carrier or diluent.
16. A cosmetic composition comprising a composition according to any one of claims 1 to 4 and 12, together with a cosmetically acceptable carrier or diluent.
17. A composition according to claim 13 or claim 14 for use in wound debridement.
18. Use of the composition of claim 15 or claim 16 in skin exfoliation.
19. A method of preventing, treating, reducing or ameliorating a skin condition, wherein the method comprises administering to a subject the composition of any one of claims 1 to 4 and 12 to 16
20. A kit for use in, or when used for, preventing, treating, reducing or ameliorating a skin condition, wherein the kit comprises the composition of any one of claims 1 to 4 and 12 to 16, and instructions for use.