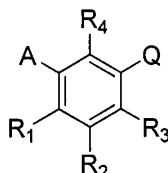


CLAIMS:

1. A method for tissue self-repair or tissue regeneration of an organ in a subject in need thereof, comprising administering to the subject in need thereof a compound represented by Formula I or a pharmaceutically acceptable salt thereof, or a combination thereof:

**Formula I**

wherein

A is C₅ alkyl, C₆ alkyl, C₅ alkenyl, C₆ alkenyl, C(O)-(CH₂)_n-CH₃ or CH(OH)-(CH₂)_n-CH₃ wherein n is 3 or 4;

R₁ is H, F or OH;

R₂ is H, F, OH, C₅ alkyl, C₆ alkyl, C₅ alkenyl, C₆ alkenyl, C(O)-(CH₂)_n-CH₃ or CH(OH)-(CH₂)_n-CH₃ wherein n is 3 or 4;

R₃ is H, F, OH or CH₂Ph;

R₄ is H, F or OH;

Q is

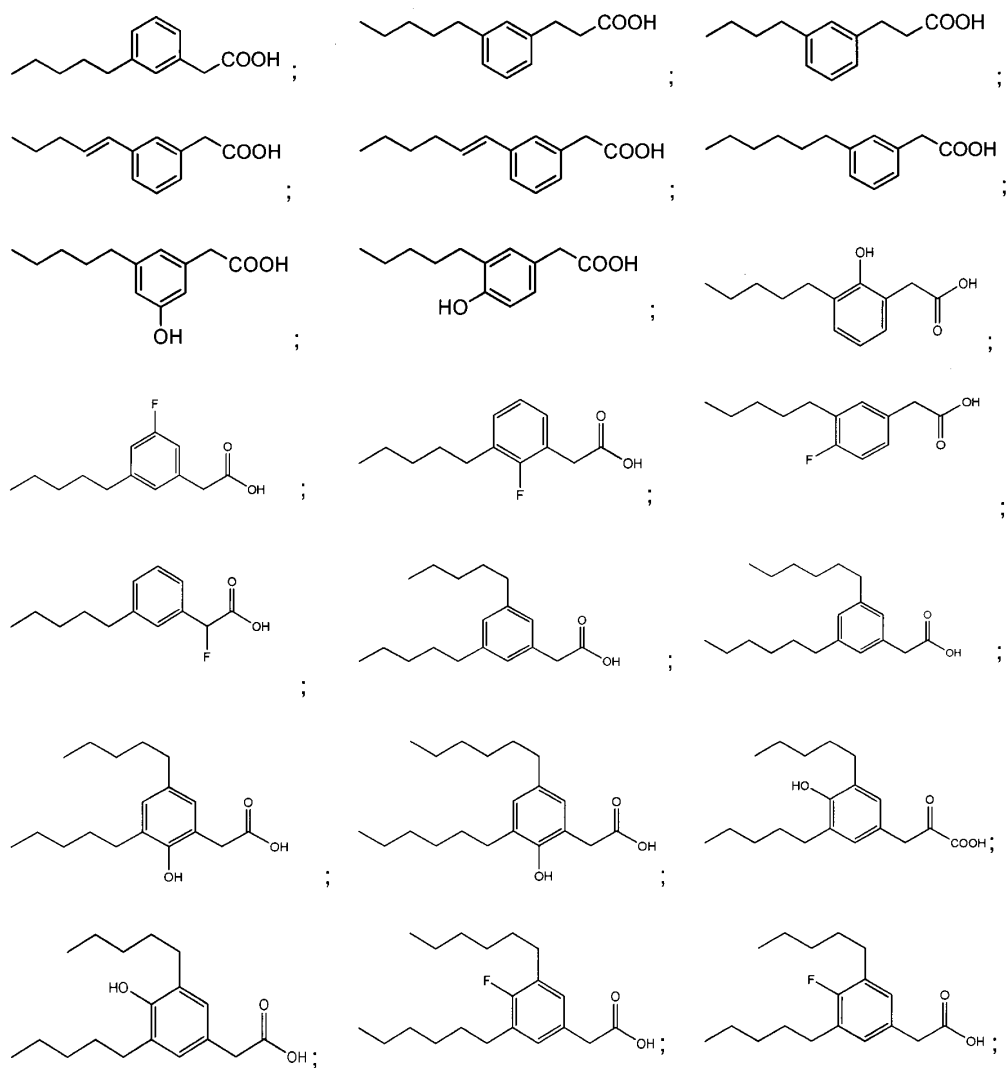
- 1) (CH₂)_mC(O)OH wherein m is 1 or 2,
- 2) CH(CH₃)C(O)OH,
- 3) C(CH₃)₂C(O)OH,
- 4) CH(F)-C(O)OH,
- 5) CF₂-C(O)OH, or
- 6) C(O)-C(O)OH.

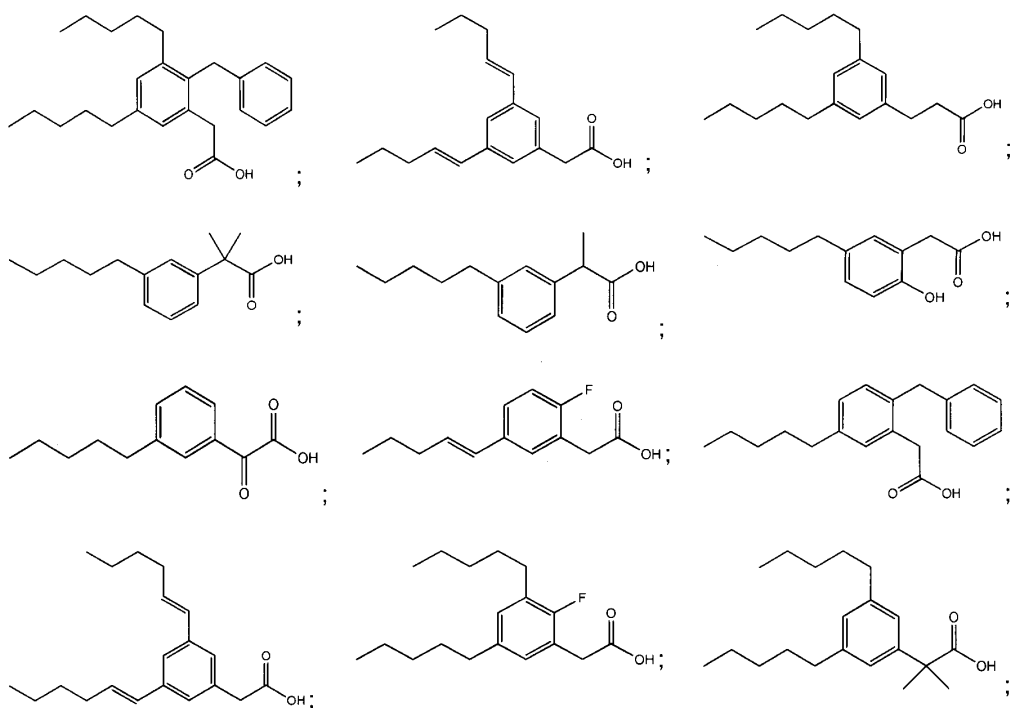
2. The method of claim 1, wherein A is C₅ alkyl or C₆ alkyl.
3. The method of any one of claims 1 or 2, wherein R₂ is H, F, OH, C₅ alkyl or C₆ alkyl.
4. The method of any one of claims 1 to 3, wherein R₃ is H, OH or CH₂Ph.
5. The method of any one of claims 1 to 4, wherein Q is (CH₂)_mC(O)OH where m is 1 or 2.

6. The method of claim 1, wherein A is C₅ alkyl or C₆ alkyl; R₁ is H, F or OH; R₂ is H, F, OH, C₅ alkyl or C₆ alkyl; R₃ is H, OH or CH₂Ph; R₄ is H, F or OH; and Q is (CH₂)_mC(O)OH where m is 1 or 2.

7. The method of claim 1, wherein A is C₅ alkyl; R₁ is H; R₂ is H or C₅ alkyl; R₃ is H; R₄ is H; and Q is (CH₂)_mC(O)OH where m is 1.

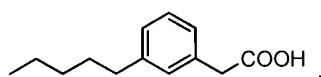
8. The method of any one of claims 1 to 7, wherein said compound is selected from the group consisting of the compounds represented by the following structures:





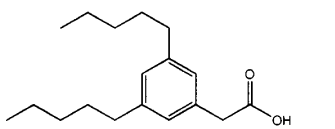
and pharmaceutically acceptable salts thereof.

9. The method of claim 1, wherein said compound is represented by the following structure:



or pharmaceutically acceptable salt thereof.

10. The method of claim 1, wherein said compound is represented by the following structure:



or pharmaceutically acceptable salt thereof.

11. The method of any one of claims 1 to 10, wherein the pharmaceutically acceptable salt is a base addition salt comprising a metal counterion selected from the group consisting of sodium, potassium, calcium, magnesium, lithium, ammonium, manganese, zinc, iron, or copper.

12. The method of any one of claims 1-11, wherein the pharmaceutically acceptable salt is sodium.
13. The method of any one of claims 1 to 12, wherein the organ is an injured organ, and wherein the organ is heart, liver, lung, skin, stomach, intestine, muscle or cartilage.
14. A method for stimulating the generation of tissue growth, comprising the step of administering to a subject in need thereof a compound or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, or a combination thereof.
15. A method for modulating the expression of a tissue self-repair marker or a tissue regeneration marker in a cell culture or in an organ of a subject, comprising the step of administering to a subject in need thereof a compound or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, or a combination thereof.
16. The method of claim 15, wherein the marker is a metalloproteinase or a growth factor.
17. A method for increasing hepatocyte growth factor (HGF) level in an organ, comprising contacting said organ with a compound or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, or a combination thereof.
18. The method of claim 17, wherein the organ is kidney, heart, liver, lung, skin, stomach, intestine, muscle or cartilage.
19. A method for increasing Serpin A1 (AAT) level in an organ, comprising contacting said organ with a compound or a pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, or a combination thereof.
20. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for tissue self-repair or tissue regeneration of an organ in a subject in need thereof.
21. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for the manufacture of a medicament for tissue self-repair or tissue regeneration of an organ in a subject in need thereof.
22. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for stimulating the generation of tissue growth.

23. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for the manufacture of a medicament for stimulating the generation of tissue growth.
24. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for modulating the expression of a tissue self-repair marker or a tissue regeneration marker in a cell culture or in an organ of a subject.
25. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for the manufacture of a medicament for modulating the expression of a tissue self-repair marker or a tissue regeneration marker in a cell culture or in an organ of a subject.
26. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for increasing hepatocyte growth factor (HGF) level in an organ of a subject.
27. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for the manufacture of a medicament for increasing hepatocyte growth factor (HGF) level in an organ of a subject.
28. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for increasing Serpin A1 (AAT) level in an organ of a subject.
29. Use of the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof, for the manufacture of a medicament for increasing Serpin A1 (AAT) level in an organ of a subject.
30. The use of claim 24 or 25, wherein the marker is a metalloproteinase or a growth factor.
31. The use of any one of claims 20-30, wherein the organ is an injured organ, and wherein the organ is kidney, heart, liver, lung, skin, stomach, intestine, muscle or cartilage.
32. A compound for use in tissue self-repair or tissue regeneration of an organ in a subject in need thereof, wherein the compound is the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof.

33. A compound for stimulating the generation of tissue growth in a subject in need thereof, wherein the compound is the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof.

34. A compound for modulating the expression of a tissue self-repair marker or a tissue regeneration marker in a cell culture or in an organ of a subject, wherein the compound is the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof.

35. A compound for increasing hepatocyte growth factor (HGF) level in an organ of a subject, wherein the compound is the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof.

36. A compound for increasing Serpin A1 (AAT) level in an organ of a subject, wherein the compound is the compound or pharmaceutically acceptable salt thereof defined in any one of claims 1 to 12, or a combination thereof.

37. The compound for use according to claim 34, wherein the marker is a metalloproteinase or a growth factor.

38. The compound for use according to any one of claims 32-37, wherein the organ is an injured organ, and wherein the organ is kidney, heart, liver, lung, skin, stomach, intestine, muscle or cartilage.

39. A method for treating a physical injury in an organ, tissue or cell, the method comprising contacting the organ, tissue or cell with an effective amount of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12.

40. Use of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for treating a physical injury in an organ, tissue or cell.

41. Use of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for the preparation of a medicament for treating a physical injury in an organ, tissue or cell.

42. The compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for treating a physical injury in an organ, tissue or cell.

- 43.** A method for promoting wound healing, the method comprising administering to the wound or close proximity thereof an effective amount of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12.
- 44.** Use of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for promoting wound healing.
- 45.** Use of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for the preparation of a medicament for promoting wound healing.
- 46.** The compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for promoting wound healing.
- 47.** A method for treating aging of a tissue, such as the skin, the method comprising administering to the tissue an effective amount of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12.
- 48.** Use of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for treating aging of a tissue, such as the skin.
- 49.** Use of the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for the preparation of a medicament for treating aging of a tissue, such as the skin.
- 50.** The compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12, for treating aging of a tissue, such as the skin.
- 51.** The compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12 for use as an anti-aging agent.
- 52.** An anti-aging composition comprising the compound or pharmaceutically acceptable salt thereof as defined in any one of claims 1 to 12.
- 53.** The anti-aging composition of claim 52, further comprising one or more cosmeceutically acceptable vehicles.