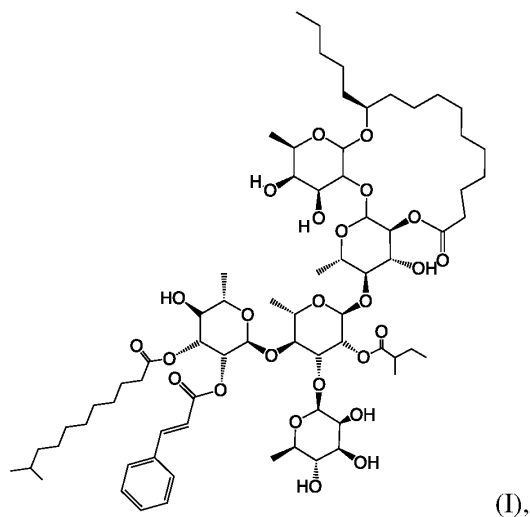
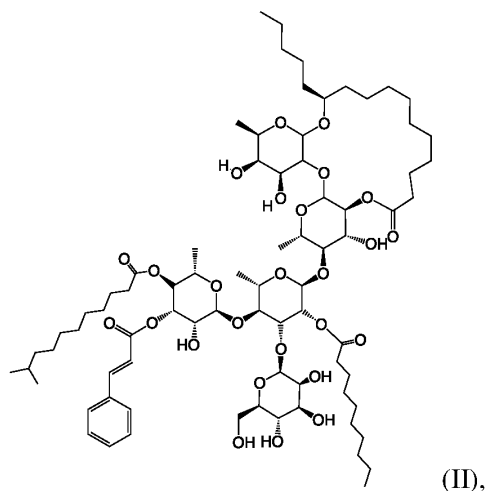


Claims

1. An extract comprising at least one resin glycoside selected from the group consisting of Batataoside I, Batataoside II, Batatoside III, Pescaprein XXVII, Batatoside F, Batatoside H, a resin glycoside of Formula (I),



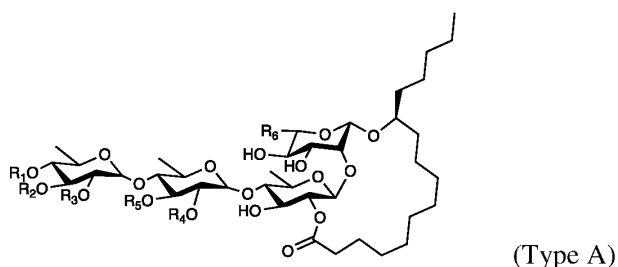
a resin glycoside of Formula (II)



wherein the resin glycoside is extracted from a plant selected from *Ipomoea batatas* (sweet potato).

2. The extract according to claim 1, wherein when Batataoside I is present, the concentration is about 0.5 mg/g to about 500 mg/g relative to the extract;
wherein when Batataoside II is present, the concentration is about 0.1 mg/g to about 5 mg/g relative to the extract;

- wherein when Batataoside III is present, the concentration is about 0.1 mg/g to about 10 mg/g relative to the extract;
- wherein when Batatoside F is present, the concentration is about 2 mg/g to about 40 mg/g relative to the extract;
- 5 wherein when Batatoside H is present, the concentration is about 2 mg/g to about 8 mg/g relative to the extract;
- wherein when Pescaprein XXVII is present, the concentration is about 0.1 mg/g to about 5 mg/g relative to the extract;
- wherein when resin glycoside of Formula (I) is present, the concentration is about 0.1 mg/g
- 10 to about 4 mg/g relative to the extract; and
- when resin glycoside of Formula (II) is present, the concentration is about 10 mg/g to about 500 mg/g relative to the extract.
3. The extract according to claim 1 or 2, comprising a mixture of at least 2 resin
- 15 glycosides.
4. The extract according to any one of claims 1 to 3, wherein the at least one resin glycoside is Batatoside I and resin glycoside of Formula (I).
- 20 5. The extract according to any one of claims 1 to 4, having a lipase inhibition activity IC_{50} value of less than 15 $\mu\text{g/mL}$.
6. An extract comprising at least one resin glycoside selected from the group consisting of Batatoside F, Batatoside E, Batatoside D, Aquaterin VI, Aquaterin V, Aquaterin XI,
- 25 Aquaterin II, Stoloniferin VIII, Aquaterin XIV, Batatoside C, Batatinoside I, Aquaterin VII, Aquaterin III, Murucoidin XVIII, Aquaterin XIII, Aquaterin XII, a Type A resin glycoside of Formula (III), Formula (IV), Formula (V), Formula (VI), and Formula (VII),



- wherein Formula (III) is when R_1 is n-dodecanoyl, R_2 is cinnamoyl, R_3 is 2-methylbutanoyl,
- 30 R_4 is H, R_5 is rhamnopyranosyl, and R_6 is methyl;

- wherein Formula (IV) is when R₁ is isobutanoyl, R₂ is H, R₃ is H, R₄ is n-octanoyl, R₅ is glucopyranosyl, and R₆ is methyl;
- wherein Formula (V) is when R₁ is n-octanoyl, R₂ is n-octanoyl, R₃ is H, R₄ is 2-methylbutanoyl, R₅ is n-octanoyl, and R₆ is methyl;
- 5 wherein Formula (VI) is when R₁ is n-dodecanoyl, R₂ is H, R₃ is H, R₄ is H, R₅ is n-octanoyl, and R₆ is methyl;
- wherein Formula (VII) is when R₁ is n-octanoyl, R₂ is H, R₃ is n-octanoyl, R₄ is 2-methylbutanoyl, R₅ is glucopyranosyl, and R₆ is methyl; and
- wherein the resin glycoside is extracted from a plant selected from *Ipomoea aquatica*
10 (*kangkong*).

7. An edible composition, comprising:
- at least one resin glycoside selected from the group consisting of Batataoside I, Batataoside II, Batatoside III, Pescaprein XXVII, Batatoside F, Batatoside H, a resin glycoside of
15 Formula (I), a resin glycoside of Formula (II), Batatoside E, Batatoside D, Aquaterin VI, Aquaterin V, Aquaterin XI, Aquaterin II, Stoloniferin VIII, Aquaterin XIV, Batatoside C, Batatinoside I, Aquaterin VII, Aquaterin III, Murucoidin XVIII, Aquaterin XIII, Aquaterin XII, a Type A resin glycoside of Formula (III), Formula (IV), Formula (V), Formula (VI), and Formula (VII);
- 20 wherein the resin glycoside is extracted from a plant selected from *Ipomoea batatas* (sweet potato) and/or *Ipomoea aquatica* (*kangkong*).

8. The edible composition according to claim 7, further comprising a component selected from protein, fiber, polyphenolic compound, lipid or a combination thereof.

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9. The edible composition according to claim 7 or 8, the edible composition is provided as a capsule.

10. The edible composition according to any one of claims 7 to 9, for use in weight loss
30 or weight management.

11. A pharmaceutical composition comprising
at least one resin glycoside selected from the group consisting of Batataoside I, Batataoside II, Batatoside III, Pescaprein XXVII, Batatoside F, Batatoside H, a resin glycoside of

Formula (I), a resin glycoside of Formula (II), Batatoside E, Batatoside D, Aquaterin VI, Aquaterin V, Aquaterin XI, Aquaterin II, Stoloniferin VIII, Aquaterin XIV, Batatoside C, Batatinoside I, Aquaterin VII, Aquaterin III, Murucoidin XVIII, Aquaterin XIII, Aquaterin XII, a Type A resin glycoside of Formula (III), Formula (IV), Formula (V), Formula (VI),
5 and Formula (VII);

wherein the resin glycoside is extracted from a plant selected from *Ipomoea batatas* (sweet potato) and/or *Ipomoea aquatica* (kangkong);

or a pharmaceutically acceptable salt, solvate or isomer thereof, optionally in combination with a pharmaceutically acceptable carrier, excipient or diluent.

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12. A method of extracting at least one resin glycoside from a plant selected from the Convolvulaceae family, comprising:

- a) subjecting the plant to a solvent extraction process for obtaining a crude extract;
- b) purifying the crude extract for obtaining a partially purified extract; and
- 15 c) further purifying the partially purified extract for obtaining the resin glycoside

wherein the resin glycoside is selected from the group consisting of Batataoside I, Batataoside II, Batatoside III, Pescaprein XXVII, Batatoside F, Batatoside H, a resin glycoside of Formula (I), a resin glycoside of Formula (II), Batatoside E, Batatoside D, Aquaterin VI, Aquaterin V, Aquaterin XI, Aquaterin II, Stoloniferin VIII, Aquaterin XIV,
20 Batatoside C, Batatinoside I, Aquaterin VII, Aquaterin III, Murucoidin XVIII, Aquaterin XIII, Aquaterin XII, a Type A resin glycoside of Formula (III), Formula (IV), Formula (V), Formula (VI), and Formula (VII);

wherein the resin glycoside is extracted from a plant selected from *Ipomoea batatas* (sweet potato) and/or *Ipomoea aquatica* (kangkong).

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13. The method according to claim 12, wherein the resin glycoside is extracted from a tuber, leaf, latex, and stem of *Ipomoea batatas* (sweet potato), or from a seed, leaf or stem of *Ipomoea aquatica* (kangkong).

30 14. The method according to claims 12 or 13, wherein the step of subjecting the plant to a solvent extraction process (step a) comprises homogenising the plant in a solvent and liquid-liquid extracting the resin glycoside as a crude extract.

15. The method according to any one of claims 12 to 14, wherein the step of purifying the crude extract (step b) comprises fractionating the crude extract.
16. The method according to any one of claims 12 to 15, wherein the step of purifying
5 the crude extract (step b) comprises eluting the crude extract through a liquid chromatography column with a predetermined mobile phase.
17. The method according to claim 16, wherein the mobile phase is a gradient of hexane:ethyl acetate (hexane:EtOAc; 1:1) to pure ethyl acetate, followed by pure methanol.
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18. The method according to claim 16 or 17, wherein the mobile phase is a gradient of dichloromethane:methanol (DCM:MeOH; 7:1) to pure MeOH.
19. The method according to any one of claims 16 to 18, wherein the mobile phase is a
15 gradient of H₂O:MeOH (100:0) to pure MeOH.
20. The method according to any one of claims 12 to 19, wherein the further purifying step (step c) comprises fractionating the partially purified extract.
- 20 21. The method according to any one of claims 12 to 20, wherein the further purifying step (step c) comprises eluting the partially purified extract through a liquid chromatography column with a predetermined mobile phase.
22. The method according to any one of claims 12 to 21, wherein the further purifying
25 step (step c) comprises eluting the partially purified extract through a liquid chromatography column with a mobile phase having a gradient of MeOH-H₂O (90:10) to MeOH-H₂O (100:0).
23. The method according to any one of claims 12 to 22, wherein the further purifying
30 a mobile phase having a gradient of MeOH-H₂O (90:10) to MeOH-H₂O (100:0) with acetonitrile or with ACN-MeOH (80:20).

24. A method of treating a disease or disorder associated with excessive body fat in a subject in need thereof, comprising administering resin glycoside from a plant selected from the Convolvulaceae family.
- 5 25. The method according to claim 24, wherein the disease or disorder is selected from obesity overweight, and metabolic syndrome.