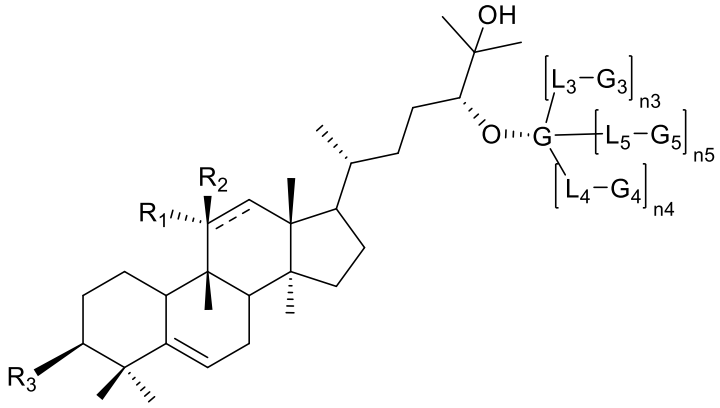
WHAT IS CLAIMED IS:

1. A compound having the structure of formula (I):

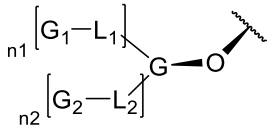


(I)

or a salt thereof, wherein:

------ represents a carbon-carbon single bond or a carbon-carbon double bond;

R_1 is absent or a hydroxy group and R_2 is hydrogen, or R_1 and R_2, together with the carbon atom to which they are attached, form an oxo group;

R_3 is selected from –OH and 

;

each of n^3 and n^4 is an integer from 1 to 3;

each of n^1, n^2, and n^5 are independently an integer from 0 to 3;

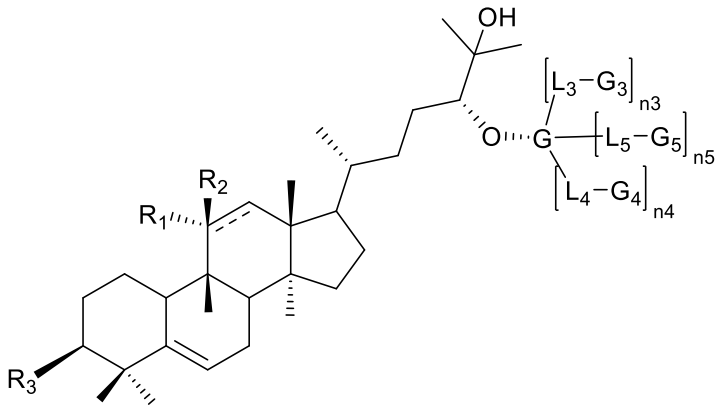
each G, G_1, G_2, G_3, G_4, and G_5 is independently a furanose or pyranose moiety;

each L_1, L_2, L_3, L_4, and L_5 is independently a glycosidic bond, wherein L_3 attached to G is an α glycosidic bond; and

when ------ is a carbon-carbon double bond, R_1 is absent;

wherein the compound is in isolated and purified form.

2. A composition, comprising a bulking agent and one or more compounds having the structure of formula (I):

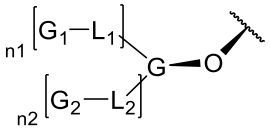


(I)

or a salt thereof, wherein:

------ represents a carbon-carbon single bond or a carbon-carbon double bond;

R_1 is absent or a hydroxy group and R_2 is hydrogen, or R_1 and R_2, together with the carbon atom to which they are attached, form an oxo group;

R_3 is selected from –OH and 

;

each of n^3 and n^4 is an integer from 1 to 3;

each of n^1, n^2, and n^5 are independently an integer from 0 to 3;

each G, G_1, G_2, G_3, G_4, and G_5 is independently a furanose or pyranose moiety;

each L_1, L_2, L_3, L_4, and L_5 is independently a glycosidic bond, wherein L_3 attached to G is an α glycosidic bond; and

when ------ is a carbon-carbon double bond, R_1 is absent .

3. The composition of claim 2, comprising greater than 0.5% by weight of the compound; or greater than 1% by weight of the compound; or greater than 2% by weight of the compound; or greater than 3% by weight of the compound; or comprising between 0.5% and 5% by weight of the compound; or comprising between 1% and 5% by weight of the compound.

4. The composition of claim 2 or 3, comprising greater than 30% by weight of the bulking agent; or greater than 50% by weight of the bulking agent; or greater than 70% by weight of the bulking agent; or greater than 90% by weight of the bulking agent; or greater than 95% by weight of the bulking agent; or greater than 99.5% by weight of the bulking agent.

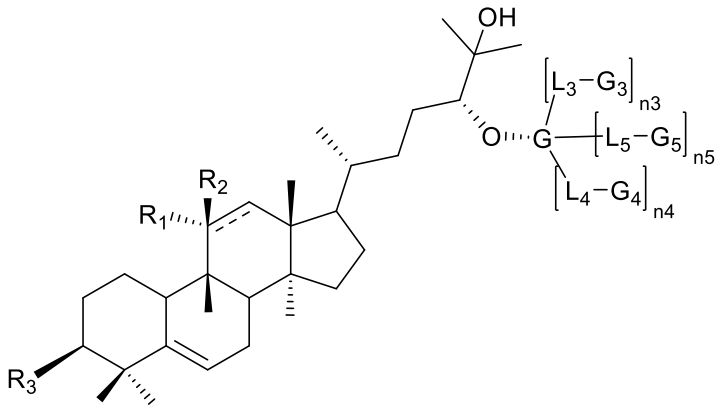
5. The composition of any one of claims 2-4, wherein the bulking agent is selected from the group consisting of maltodextrin, dextro-maltodextrin blends, corn syrup solids, sucrose, fructose, glucose, invert sugar, sorbitol, xylose, ribulose, mannose, mannitol, galactitol, lactitol, isomalt, maltose, tagatose, lactose, inulin, glycerol, propylene glycol, polydextrose, fructooligosaccharides, cellulose, cellulose derivatives, erythritol, and combinations thereof.

6. The composition of any one of claims 2-5, wherein the bulking agent is in particulate form and the compound is present as a coating on the particles; wherein the average particle size is between 200 µm and 2 mm; or the average particle size is between 500 µm and 700 µm; or the average particle size is between 200 µm and 500 µm; or the average particle size is between 800 µm and 1.5 mm.

7. The composition of any one of claims 2-5, wherein the composition is in particulate form; and wherein the average particle size is between 200 µm and 2 mm; or the average particle size is between 200 µm and 500 µm; or the average particle size is between 500 µm and 700 µm; or the average particle size is between 800 µm and 1.5 mm.

8. The composition of any one of claims 2-7, comprising one or more additional compounds selected from the group consisting of steviosides, rebaudiosides, glycyrrhizic acid, glycyrrhizin, GAMG (glycyrrhetinic acid monoglucuronide), thaumatin, monellin, brazzein, curculin, mabinlin, pentadin, monatin, abrusosides, albiziasaponins, Baiyunoside, bryoside, cussoracosides, cyclocarioside, mukuroziosides, osladin, periandrin, phlomisoside, Polypodosides, pterocaryosides, rubusosides, telosmosides, selligueain A, hernandulcin, phlorizin, trilobatin, phylodulcin, dulcoside A, gaudichaudioside A, and combinations thereof.

9. An ingestible composition, comprising an ingestibly acceptable ingredient and one or more compounds having the structure of formula (I):

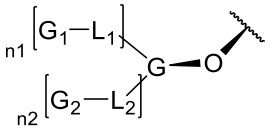


(I)

or a salt thereof, wherein:

⁼⁼⁼⁼⁼ represents a carbon-carbon single bond or a carbon-carbon double bond;

R_1 is absent or a hydroxy group and R_2 is hydrogen, or R_1 and R_2, together with the carbon atom to which they are attached, form an oxo group;

R_3 is selected from –OH and 

;

each of n^3 and n^4 is an integer from 1 to 3;

each of n^1, n^2, and n^5 are independently an integer from 0 to 3;

each G, G_1, G_2, G_3, G_4, and G_5 is independently a furanose or pyranose moiety;

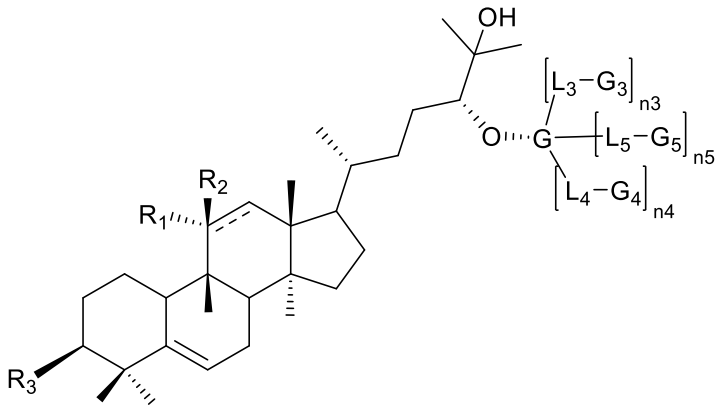
each L_1, L_2, L_3, L_4, and L_5 is independently a glycosidic bond, wherein L_3 attached to G is an α glycosidic bond; and

when ⁼⁼⁼⁼⁼ is a carbon-carbon double bond, R_1 is absent;

wherein the concentration of the compound in the composition is greater than 100 ppm; or the concentration of the compound is greater than 300 ppm; or the concentration of the compound is greater than 500 ppm; or the concentration of the compound is greater then 800 ppm; or the concentration of the compound is between 300 ppm and 4000 ppm; or the concentration of the compound is between 300 ppm and 2000 ppm; or the concentration of the compound is between 800 ppm and 1500 ppm.

10. A tabletop sweetener product, comprising a single serving packet containing a composition of any one of claims 2-9.

11. A method of increasing the sweetness of an ingestible composition, comprising combining the ingestible composition with at least one compound of formula (I):

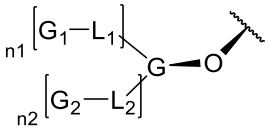


(I)

or a salt thereof, wherein:

------ represents a carbon-carbon single bond or a carbon-carbon double bond;

R_1 is absent or a hydroxy group and R_2 is hydrogen, or R_1 and R_2, together with the carbon atom to which they are attached, form an oxo group;

R_3 is selected from –OH and 

;

each of n^3 and n^4 is an integer from 1 to 3;

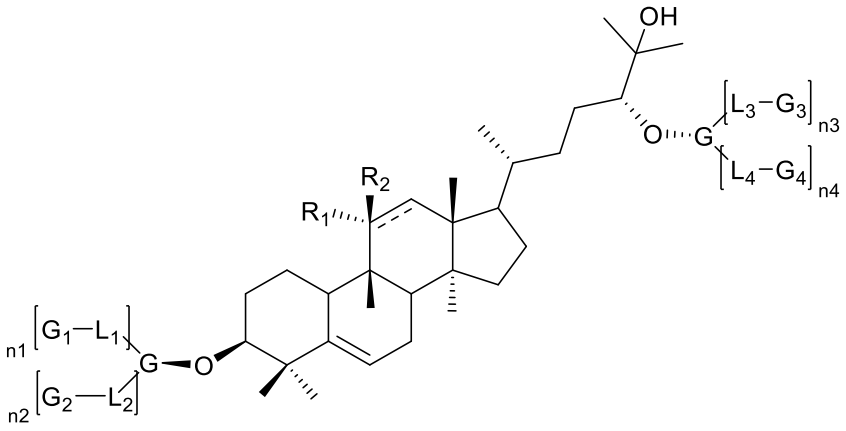
each of n^1, n^2, and n^5 are independently an integer from 0 to 3;

each G, G_1, G_2, G_3, G_4, and G_5 is independently a furanose or pyranose moiety;

each L_1, L_2, L_3, L_4, and L_5 is independently a glycosidic bond, wherein L_3 attached to G is an α glycosidic bond; and

when ------ is a carbon-carbon double bond, R_1 is absent.

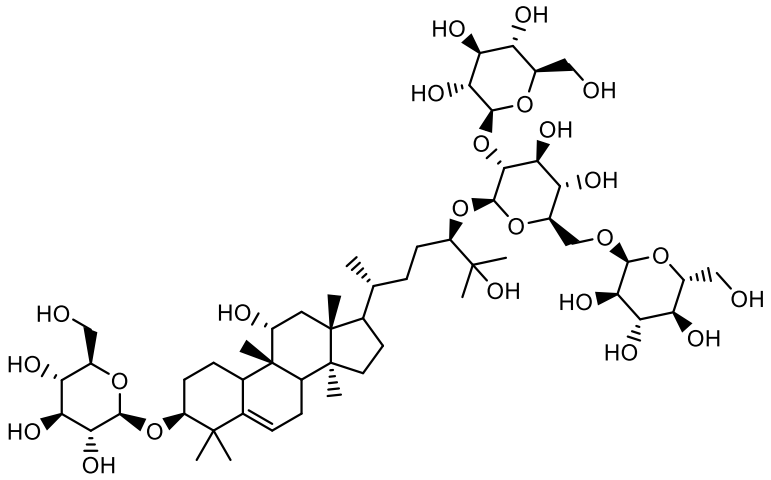
12. The compound of claim 1, the composition of any one of claims 2-9, the product of claim 10, or the method of claim 11, wherein the compound has the structure of formula (Ia):



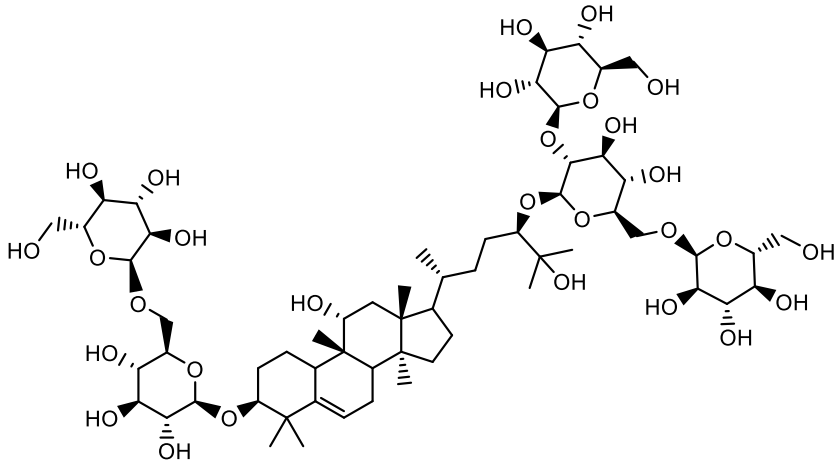
(Ia), or a salt thereof.

13. The compound of claim 1, the composition of any one of claims 2-9, the product of claim 10, or the method of claim 11, wherein each G, G_1, G_2, G_3, G_4, and G_5 is independently selected from the group consisting of D-Glucopyranose, L-Glucopyranose, D-Fructopyranose, D-Mannopyranose, L-Mannopyranose, D-Galactopyranose, L-Galactopyranose, D-Tagatopyranose, L-Sorbopyranose, D-Xylopyranose, D-Ribopyranose, D-Arabopyranose, L-Arabopyranose, L-Xylulopyranose, D-Ribulopyranose, 6-deoxy-D-Glucopyranose, 6-deoxy-L-Glucopyranose, 6-deoxy-D-Galactopyranose, 6-deoxy-L-Galactopyranose, 6-deoxy-L-Mannopyranose, 2-deoxy-D-Ribopyranose, D-Hamamelopyranose, D-Glucofuranose, L-Glucofuranose, D-Fructofuranose, D-Mannofuranose, L-Mannofuranose, D-Galactofuranose, L-Galactofuranose, D-Tagatofuranose, L-Sorbofuranose, D-Xylofuranose, D-Ribofuranose, D-Arabofuranose, L-Arabofuranose, L-Xylulofuranose, D-Ribulofuranose, D-Threofuranose, D-Erythrofuranose, 6-deoxy-D-Glucofuranose, 6-deoxy-L-Glucofuranose, 6-deoxy-D-Galactofuranose, 6-deoxy-L-Galactofuranose, 6-deoxy-L-Mannofuranose, 2-deoxy-D-Ribofuranose, D-Apiofuranose, and D-Hamamelofuranose.

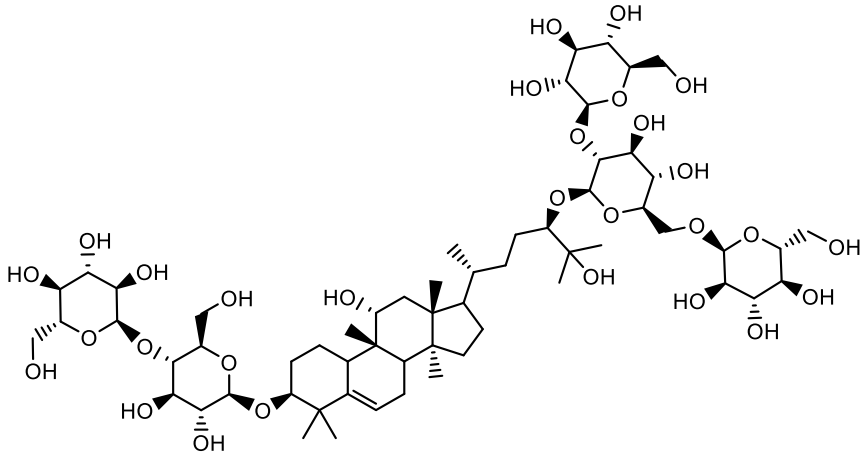
14. The compound of claim 1, the composition of any one of claims 2-9, the product of claim 10, or the method of claim 11, wherein the compound has a structure selected from:



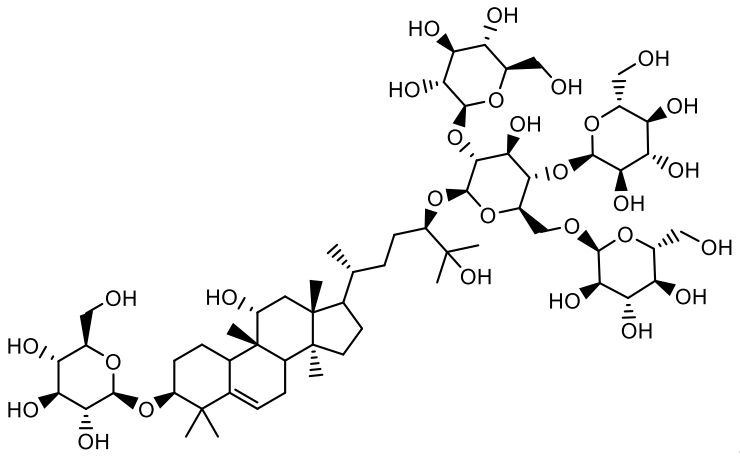
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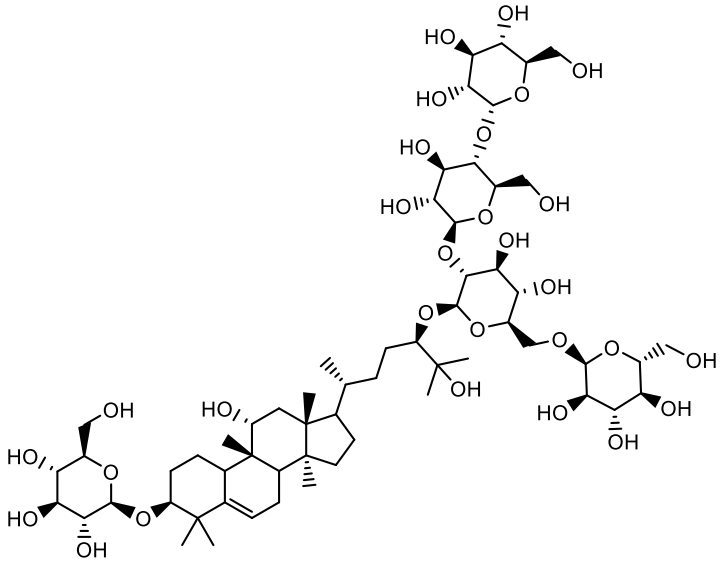
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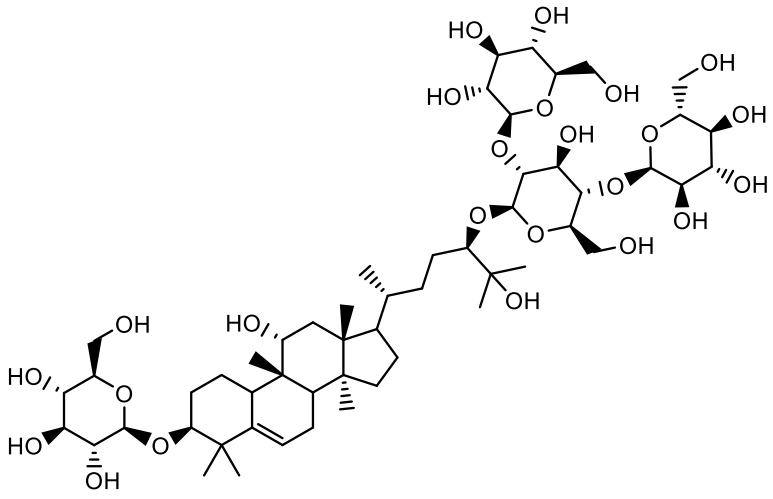
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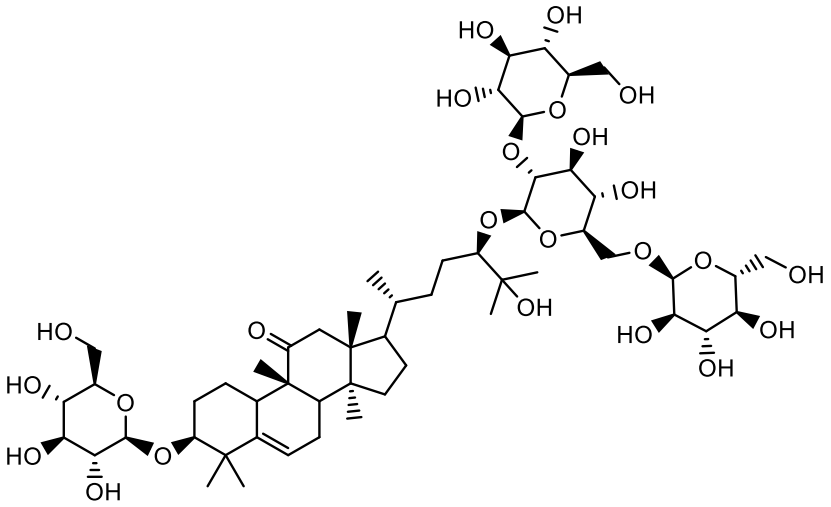
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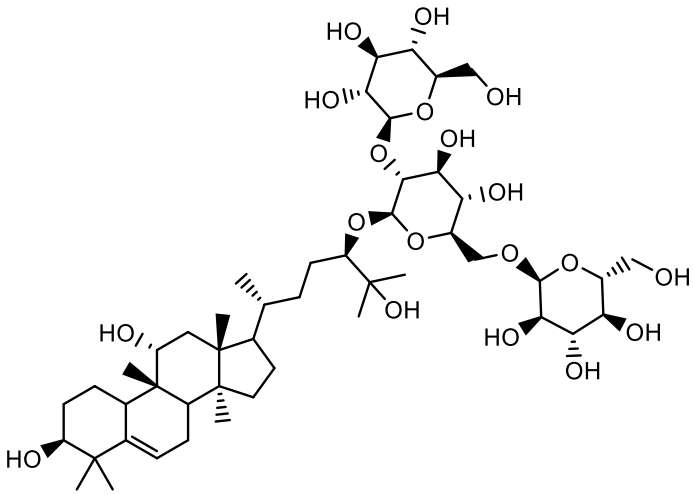
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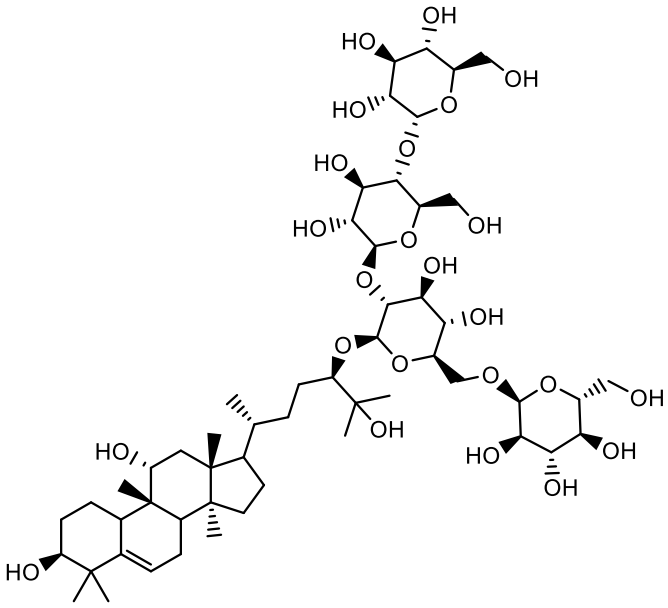
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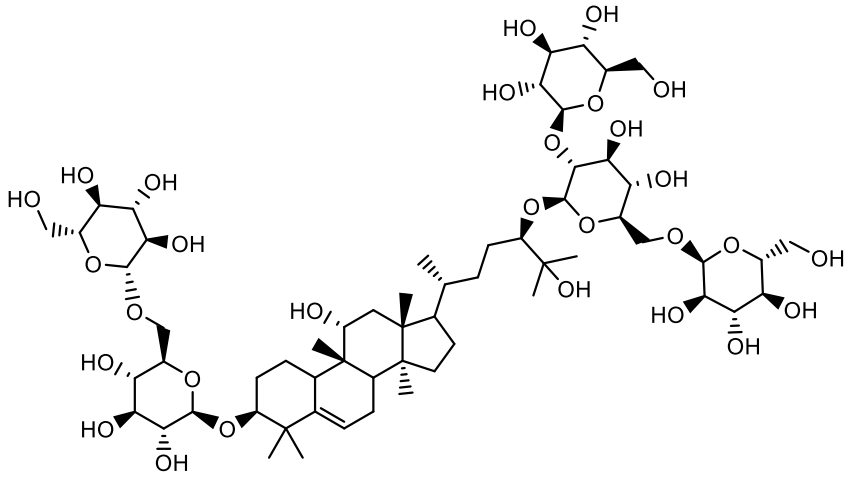
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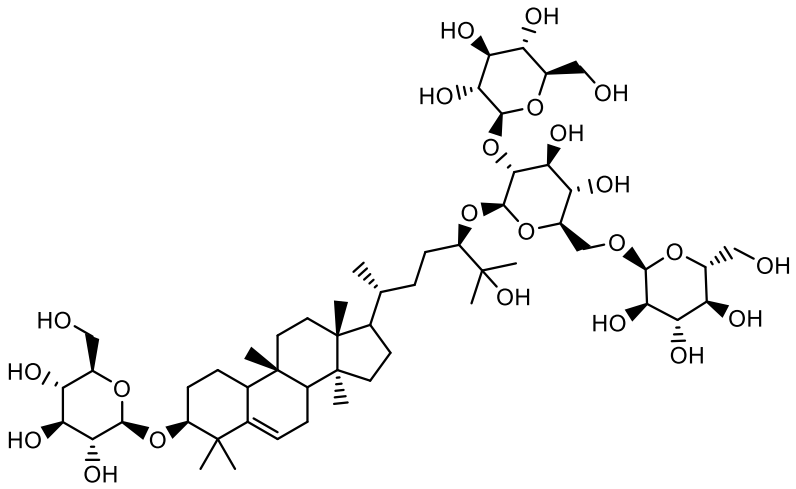
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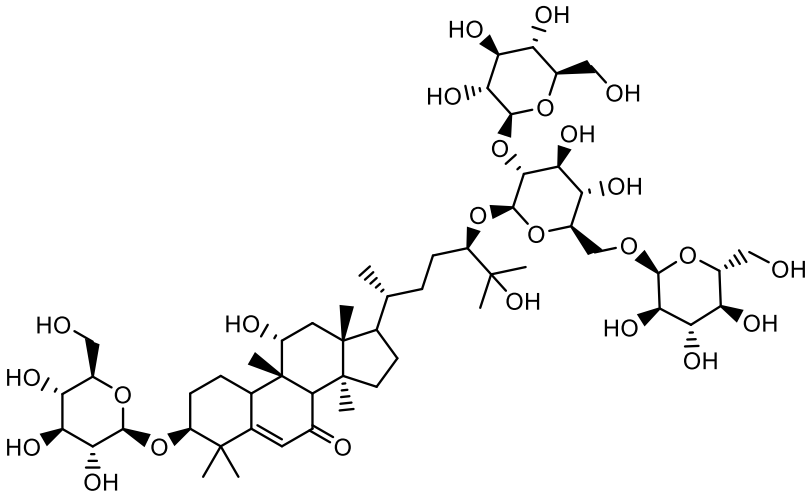
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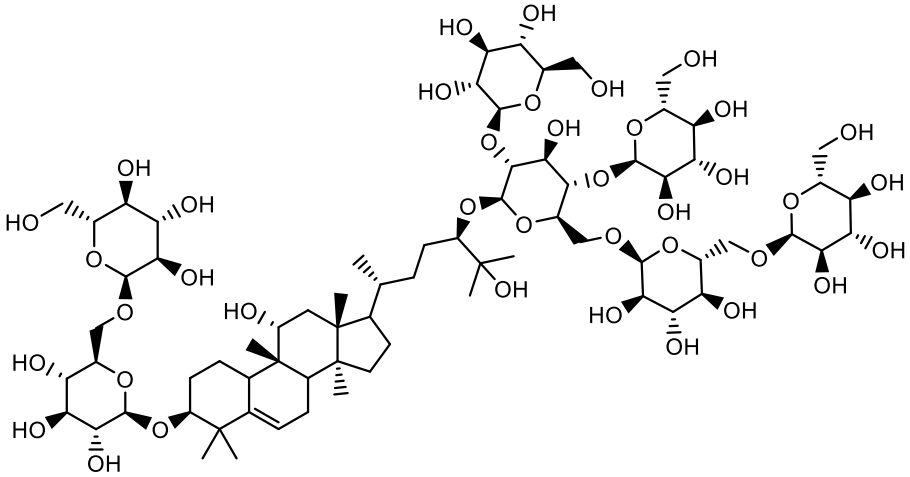
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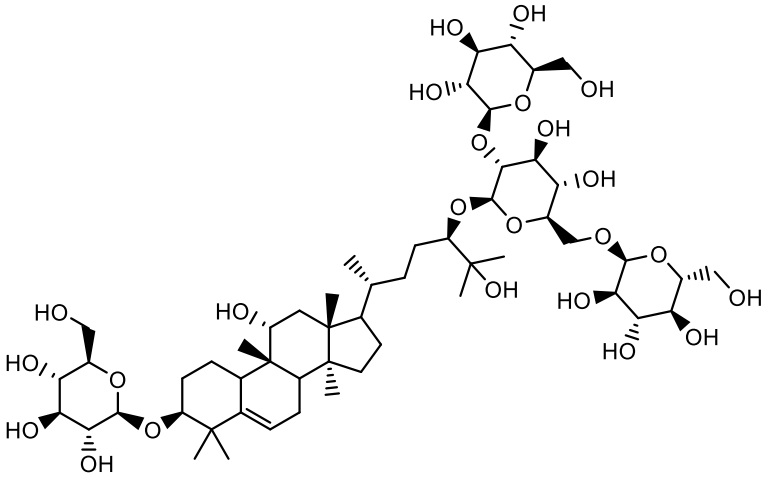


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, or a salt thereof.

15. The compound of claim 1, the composition of any one of claims 2-9, the product of claim 10, or the method of claim 11, wherein the compound has a structure of



, or a salt thereof.