R^d and R^e each independently represent H or C_1-C_6 alkyl, wherein alkyl groups are optionally partly or completely fluorinated;

and pharmaceutically acceptable salts thereof.

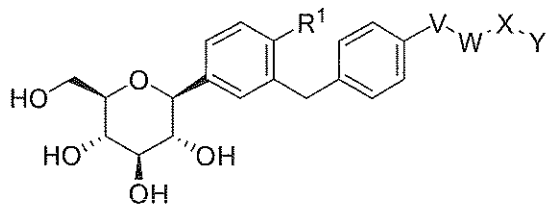
[0006b] In one aspect, there is provided a pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound as described herein.

[0006c] In one aspect, there is a provided use of a therapeutically effective amount of a compound as described herein in the manufacture of a medicament for treating diabetes.

[0006d] In one aspect, there is provided a prodrug ester of a compound as described herein.

[0006e] In one aspect, there is provided use of a therapeutically effective amount of a compound as described herein in the manufacture of a medicament for treating a disease or condition mediated by SGLT.

[0006f] In one aspect, there is provided a compound of the formula IA:



(IA)

wherein

R^1 is a member selected from the group consisting of hydrogen and halo;

V is a member selected from the group consisting of oxygen and a single bond;

W is a member selected from the group consisting of C_1-C_6 alkylene, C_2-C_6 alkenylene and C_2-C_6 alkynylene, wherein the alkylene group is optionally mono- or disubstituted by C_1-C_3 alkyl;

X is a member selected from the group consisting of oxygen and a single bond; and

Y is a member selected from the group consisting of hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_{10} cycloalkyl, C_5-C_{10} cycloalkenyl, (C_3-C_{10} cycloalkyl)C_1-C_4 alkyl, (C_1-C_4 alkyloxy)C_1-C_3 alkyl and (C_3-C_{10} cycloalkyloxy)C_1-C_3 alkyl,

wherein the cycloalkyl group is optionally mono- or disubstituted by C_1-C_3 alkyl;

wherein in cycloalkyl groups or cycloalkyl portions of Y, one methylene group is optionally replaced by O, S, or NR^b, and one methyne group is optionally replaced by N;

wherein R^b is a member selected from the group consisting of hydrogen and C_1-C_4 alkyl, and

wherein

1) when W is C_1-C_6 alkylene, then X is oxygen and Y is other than hydrogen or C_1-C_6 alkyl; and

2)

a) when W is a member selected from the group consisting of C_2-C_6 alkenylene and C_2-C_6 alkynylene and V is a single bond , then X is oxygen and Y is other than hydrogen, C_1-C_6 alkyl or (C_3-C_{10} cycloalkyl)C_1-C_4 alkyl; and

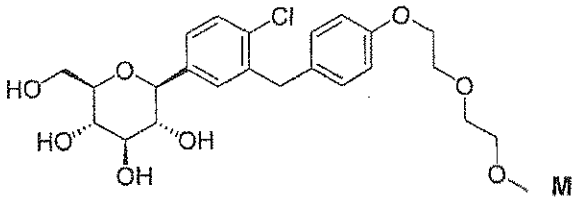
b) when W is a member selected from the group consisting of C_2-C_6 alkenylene and C_2-C_6 alkynylene and V is oxygen,

i) when Y is other than C_3-C_{10} cycloalkyl or C_5-C_{10} cycloalkenyl, then X is oxygen, or

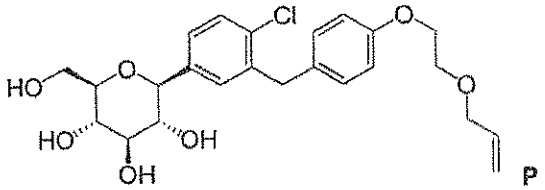
ii) when Y is a member selected from the group consisting of C_3-C_{10} cycloalkyl and C_5-C_{10} cycloalkenyl, then X is a member selected from the group consisting of oxygen and a single bond;

or a pharmaceutically acceptable salt thereof.

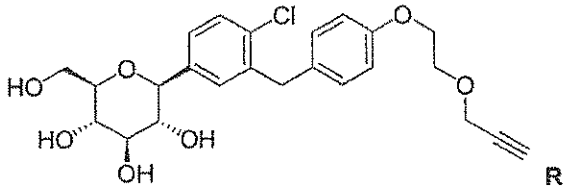
[0006g] In one aspect there is provided a compound selected from the group consisting of:



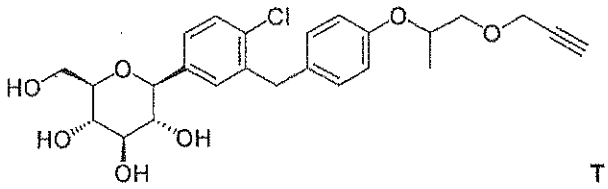
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2-methoxyethoxy)ethoxy) benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



(2S,3R,4R,5S,6R)-2-(3-(4-(2-(allyloxy)ethoxy)benzyl)-4-chlorophenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;

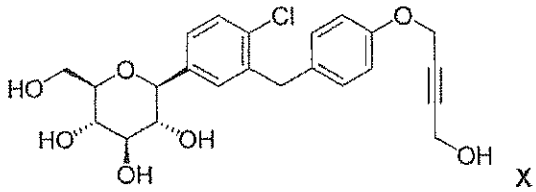


(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(prop-2-ynyloxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



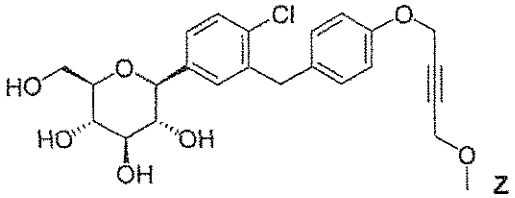
T

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(1-(prop-2-ynyloxy)propan-2-yloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



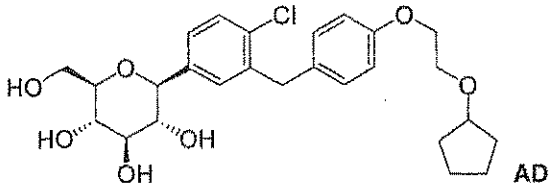
X

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(4-hydroxybut-2-ynyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



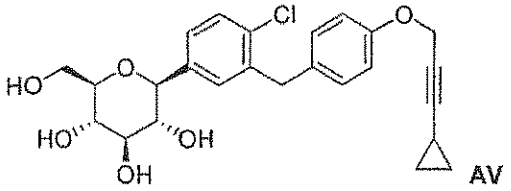
Z

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(4-methoxybut-2-ynyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



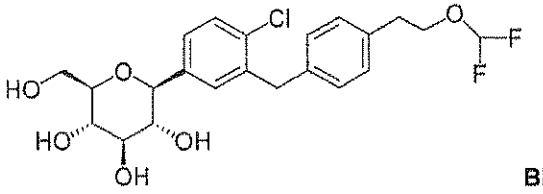
AD

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(cyclopentyloxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



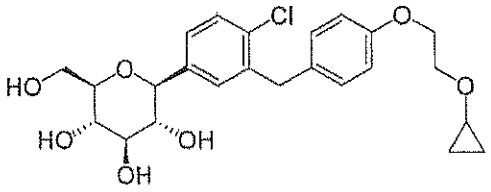
AV

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(3-cyclopropylprop-2-ynyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



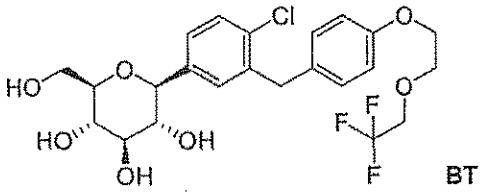
BN

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(difluoromethoxy)ethyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



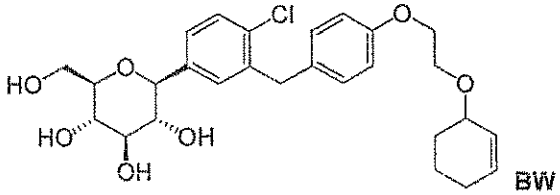
BQ

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclopropoxyethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



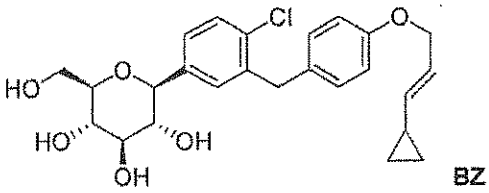
BT

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2,2,2-trifluoroethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



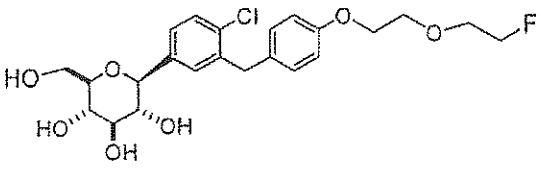
BW

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(cyclohex-2-enyloxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



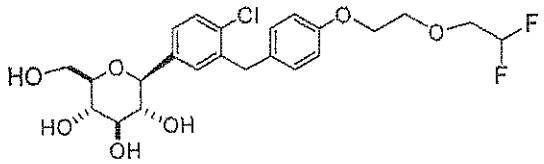
BZ

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-((E)-3-cyclopropylallyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



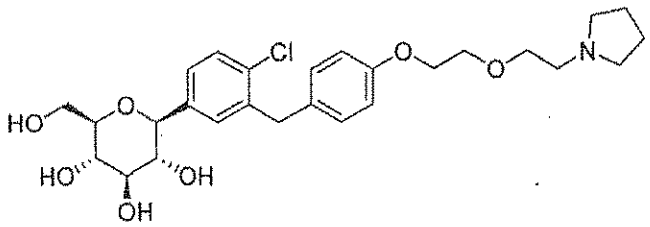
CC

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2-fluoroethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



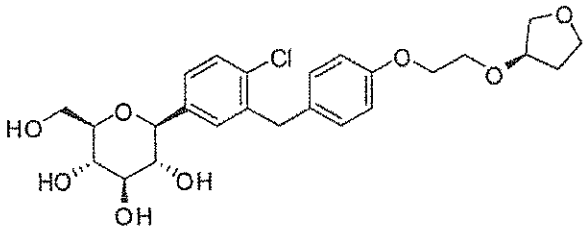
CF

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2,2-difluoroethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



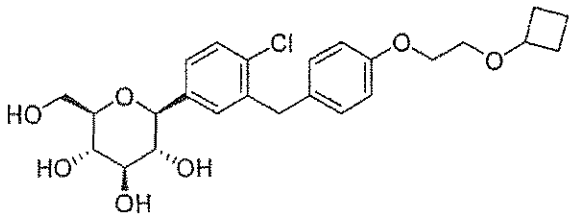
CH

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2-(pyrrolidin-1-yl)ethoxy)ethoxy)benzyl) phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



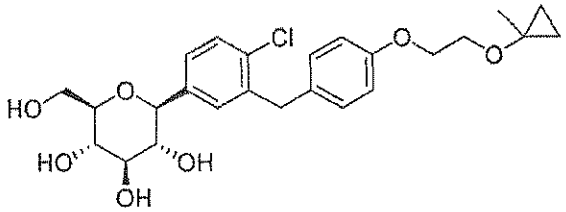
CK

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-((R)-tetrahydrofuran-3-yloxy)ethoxy)benzyl) phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



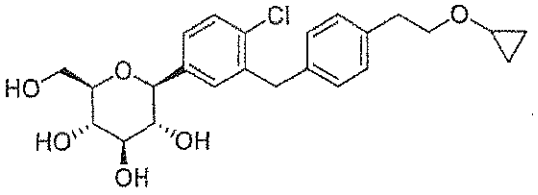
CM

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclobutoxyethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



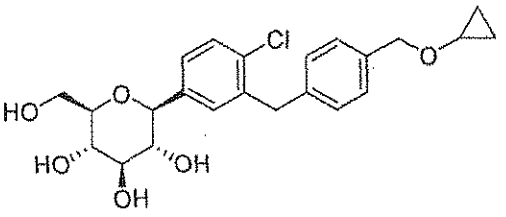
CP

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(1-methylcyclopropoxy)ethoxy)benzyl)phenyl) -6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



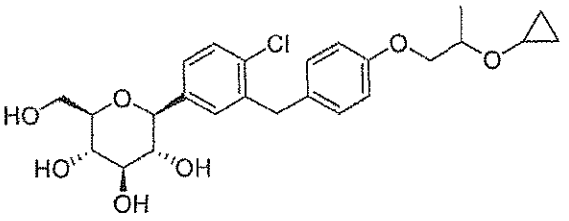
CT

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclopropoxyethyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



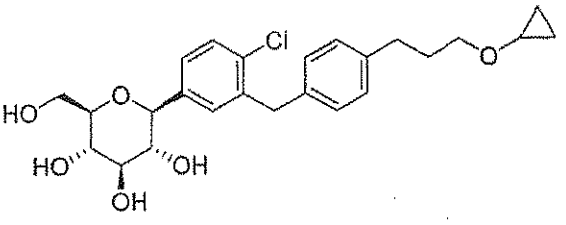
CX

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(cyclopropoxymethyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



DC

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclopropoxypropoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol; and

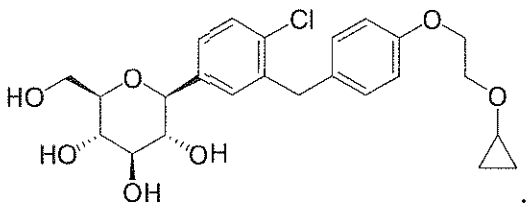


DJ

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(3-cyclopropoxypropyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;

or a pharmaceutically acceptable salt thereof.

[0006h] In one aspect there is provided a compound of the formula:

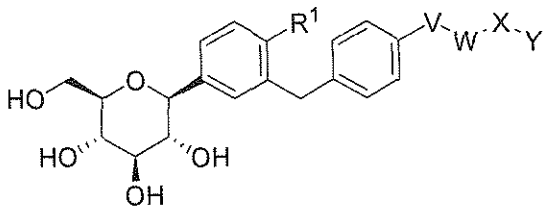


[0006i] In one aspect there is provided a pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound as described herein or a pharmaceutically acceptable salt thereof.

[0006j] In one aspect there is provided a use of a therapeutically effective amount of a compound as described herein or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating a disease or condition selected from the group consisting of type 1 diabetes mellitus, type 2 diabetes mellitus, hyperglycemia, diabetic complications, insulin resistance, metabolic syndrome, hyperinsulinemia, hypertension, hyperuricemia, obesity, edema, dyslipidemia, chronic heart failure, and atherosclerosis, wherein the medicament is to be administered to a subject in need thereof.

CLAIMS

1. A compound of the formula IA:



(IA)

wherein

R^1 is a member selected from the group consisting of hydrogen and halo;

V is a member selected from the group consisting of oxygen and a single bond;

W is a member selected from the group consisting of C_1-C_6 alkylene, C_2-C_6 alkenylene and C_2-C_6 alkynylene, wherein the alkylene group is optionally mono- or disubstituted by C_1-C_3 alkyl;

X is a member selected from the group consisting of oxygen and a single bond; and

Y is a member selected from the group consisting of hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_1-C_6 hydroxyalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_{10} cycloalkyl, C_5-C_{10} cycloalkenyl, (C_3-C_{10} cycloalkyl)C_1-C_4 alkyl, (C_1-C_4 alkyloxy)C_1-C_3 alkyl and (C_3-C_{10} cycloalkyloxy)C_1-C_3 alkyl,

wherein the cycloalkyl group is optionally mono- or disubstituted by C_1-C_3 alkyl;

wherein in cycloalkyl groups or cycloalkyl portions of Y, one methylene group is optionally replaced by O, S, or NR^b, and one methyne group is optionally replaced by N;

wherein R^b is a member selected from the group consisting of hydrogen and C_1-C_4 alkyl, and

wherein

1) when W is C_1-C_6 alkylene, then X is oxygen and Y is other than hydrogen or C_1-C_6 alkyl; and

2)

a) when W is a member selected from the group consisting of C_2-C_6 alkenylene and C_2-C_6 alkynylene and V is a single bond , then X is oxygen and Y is other than hydrogen, C_1-C_6 alkyl or (C_3-C_{10} cycloalkyl)C_1-C_4 alkyl; and

b) when W is a member selected from the group consisting of C_2-C_6 alkenylene and C_2-C_6 alkynylene and V is oxygen,

i) when Y is other than C_3-C_{10} cycloalkyl or C_5-C_{10} cycloalkenyl, then X is oxygen, or

ii) when Y is a member selected from the group consisting of C_3-C_{10} cycloalkyl and C_5-C_{10} cycloalkenyl, then X is a member selected from the group consisting of oxygen and a single bond;

or a pharmaceutically acceptable salt thereof.

2. A compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein V is oxygen.

3. A compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein W is C_1-C_6 alkylene.

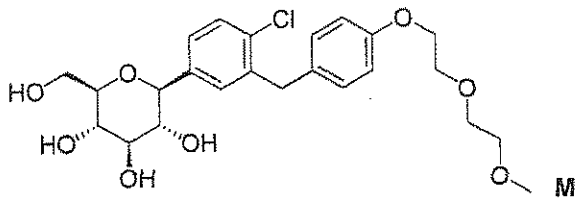
4. A compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein W is selected from the group consisting of C_1-C_6 alkylene, C_2-C_6 alkenylene and C_2-C_6 alkynylene.

5. A compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein Y is selected from the group consisting of hydrogen, C_1-C_6 alkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_{10} cycloalkyl, C_5-C_{10} cycloalkenyl, (C_3-C_{10} cycloalkyl)C_1-C_4 alkyl and (C_1-C_4 alkyloxy)C_1-C_3 alkyl, wherein the cycloalkyl group is optionally mono- or disubstituted by C_1-C_3 alkyl, wherein in cycloalkyl groups or cycloalkyl portions, one methylene group is optionally replaced by O, S, or NR^b, and one methyne group is optionally replaced by N.

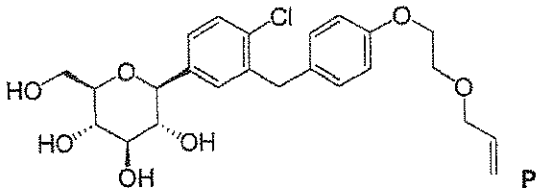
6. A compound of claim 5 or a pharmaceutically acceptable salt thereof, wherein Y is selected from the group consisting of C_1-C_6 haloalkyl, C_2-C_6 alkynyl, and C_3-C_{10} cycloalkyl.

7. A compound of claim 1 or a pharmaceutically acceptable salt thereof, wherein V is oxygen, W is C_1-C_6 alkylene, and Y is C_3-C_{10} cycloalkyl.

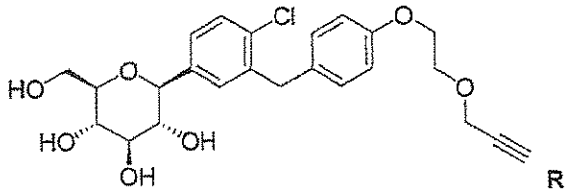
8. A compound selected from the group consisting of:



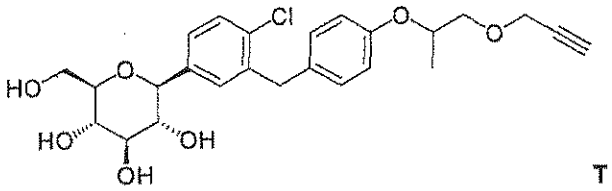
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2-methoxyethoxy)ethoxy) benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



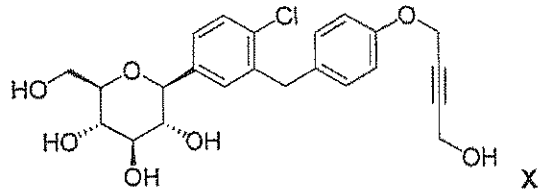
(2S,3R,4R,5S,6R)-2-(3-(4-(2-(allyloxy)ethoxy)benzyl)-4-chlorophenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



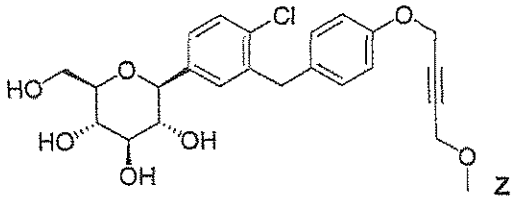
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(prop-2-ynyloxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



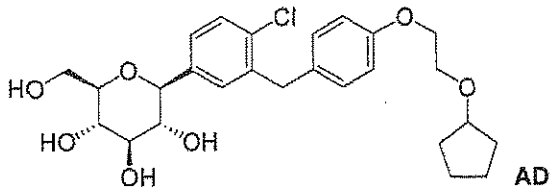
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(1-(prop-2-ynyloxy)propan-2-yloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



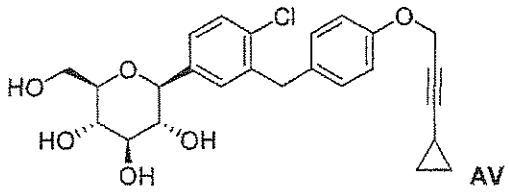
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(4-hydroxybut-2-ynyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



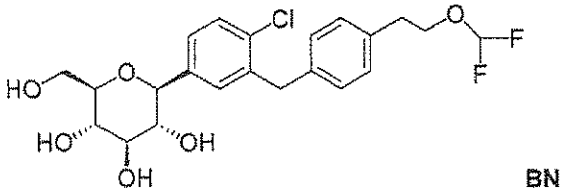
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(4-methoxybut-2-ynyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



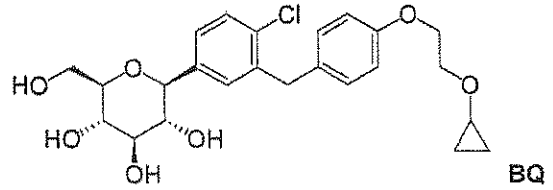
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(cyclopentyloxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



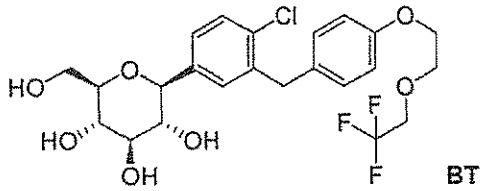
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(3-cyclopropylprop-2-ynyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



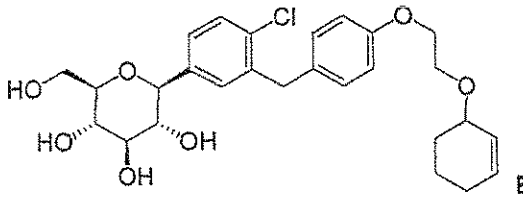
(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(difluoromethoxy)ethyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclopropoxyethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;

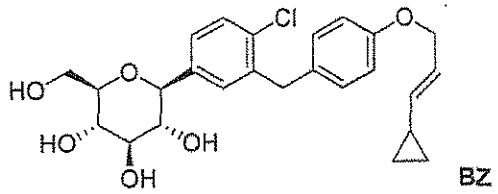


(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2,2,2-trifluoroethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



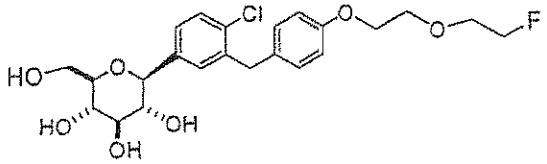
BW

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(cyclohex-2-enyloxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



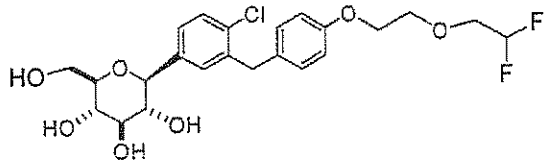
BZ

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-((E)-3-cyclopropylallyloxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



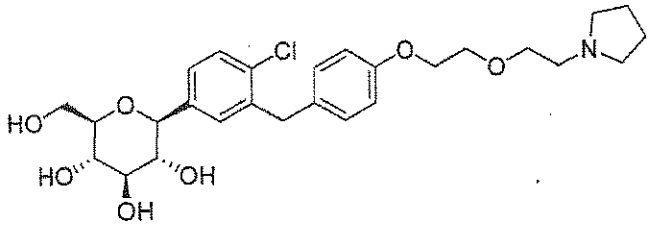
CC

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2-fluoroethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



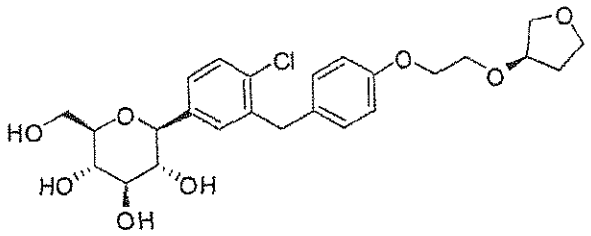
CF

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2,2-difluoroethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



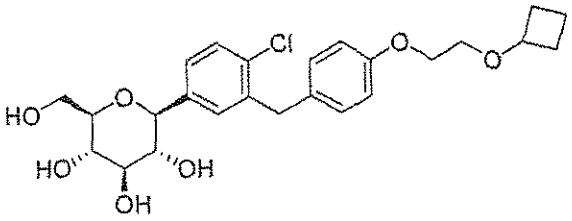
CH

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(2-(pyrrolidin-1-yl)ethoxy)ethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



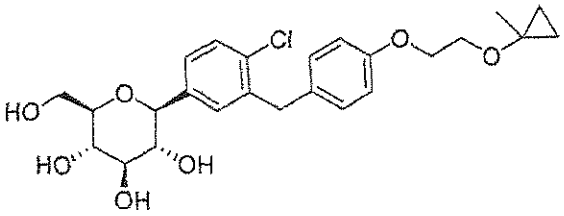
CK

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-((R)-tetrahydrofuran-3-yloxy)ethoxy)benzyl) phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



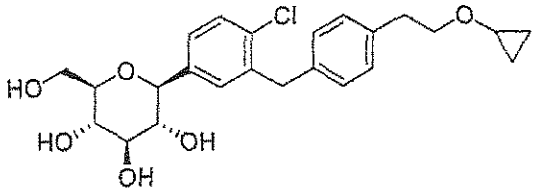
CM

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclobutoxyethoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



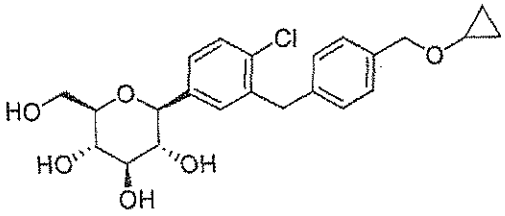
CP

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-(1-methylcyclopropoxy)ethoxy)benzyl)phenyl) -6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



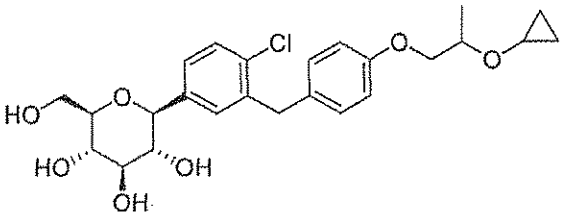
CT

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclopropoxyethyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



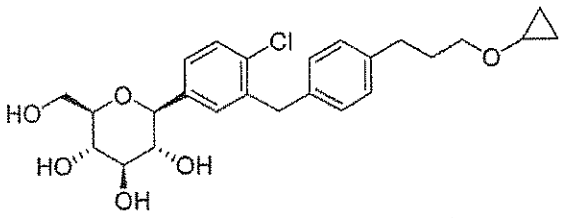
CX

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(cyclopropoxymethyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;



DC

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(2-cyclopropoxypropoxy)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol; and

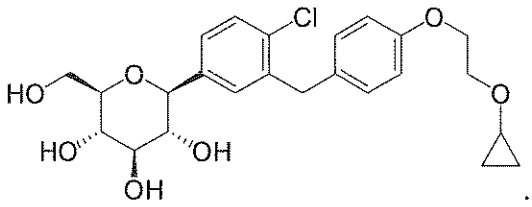


DJ

(2S,3R,4R,5S,6R)-2-(4-chloro-3-(4-(3-cyclopropoxypropyl)benzyl)phenyl)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol;

or a pharmaceutically acceptable salt thereof.

9. A compound of the formula:



10. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of any one of claims **1** to **9** or a pharmaceutically acceptable salt thereof.

11. Use of a therapeutically effective amount of a compound of any one of claims **1-9** or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for treating a disease or condition selected from the group consisting of type 1 diabetes mellitus, type 2 diabetes mellitus, hyperglycemia, diabetic complications, insulin resistance, metabolic syndrome, hyperinsulinemia, hypertension, hyperuricemia, obesity, edema, dyslipidemia, chronic heart failure, and atherosclerosis, wherein the medicament is to be administered to a subject in need thereof.

12. The use in accordance with claim **11**, wherein said disease is type 1 diabetes mellitus.

13. The use in accordance with claim **11**, wherein said disease is type 2 diabetes mellitus.

14. The use in accordance with claim **11**, wherein said medicament is to be administered in combination with a second therapeutic agent.

15. The use in accordance with claim **14**, wherein said second therapeutic agent is selected from the group consisting of antidiabetic agents, lipid-lowering/lipid-modulating agents, agents for treating diabetic complications, anti-obesity agents, antihypertensive agents, antihyperuricemic agents, and agents for treating chronic heart failure and atherosclerosis.