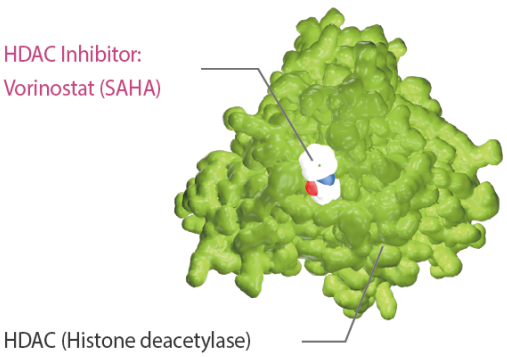
SGLT

Sodium-dependent glucose cotransporters

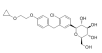


SGLT (Sodium-dependent glucose cotransporters) are a family of glucose transporter found in the intestinal mucosa (enterocytes) of the small intestine (SGLT1) and the proximal tubule of the nephron (SGLT2 in PCT and SGLT1 in PST). SGLT contribute torenal glucose reabsorption. In the kidneys, 100% of the filtered glucose in the glomerulus has to be reabsorbed along the nephron (98% in PCT, via SGLT2). In case of too high plasma glucose concentration (hyperglycemia), glucose is excreted in urine (glucosuria); because SGLT are saturated with the filtered monosaccharide. Glucose is never secreted by the nephron. There are two most well known members of SGLT family are SGLT1 and SGLT2, which are members of the SLC5A gene family. Inhibition of SGLT2 leads to a reduction in blood glucose levels. Therefore, SGLT2 inhibitors have potential use in the treatment of type II diabetes.

SGLT Inhibitors & Modulators

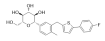
Bexagliflozin
(EGT1442; EGT0001442; THR-1442) Cat. No.: HY-17604

Bioactivity: Bexagliflozin is a potent and selective SGLT2 inhibitor with IC50 value of 5.6 μM /2 nM in SGLT1 /SGLT2 respectively. target: SGLT2 IC50: 5.6 μM (SGLT1)/ 2 nM (SGLT2) 1) In normal rats and dogs a saturable urinary glucose excretion was produced with an ED50 of 0.38 and 0.09 mg/kg, respectively. 2)...
Purity: 98.63%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



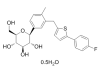
Canagliflozin
(JNJ 24831754ZAE; JNJ 28431754; JNJ 28431754AAA; TA 7284) Cat. No.: HY-10451

Bioactivity: Canagliflozin is a selective **SGLT2** inhibitor with **IC_{50}**s of 2 nM, 3.7 nM, and 4.4 nM for mSGLT2, rSGLT2, and hSGLT2 in CHOK cells, respectively.
Purity: 99.61%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



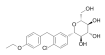
Canagliflozin hemihydrate
(JNJ28431754 hemihydrate; TA-7284 hemihydrate) Cat. No.: HY-I0383

Bioactivity: Canagliflozin 0.5 H2O(JNJ 28431754; TA 7284) is a highly potent and selective SGLT2 inhibitor for hSGLT2 with IC50 of 2.2 nM, exhibits 413-fold selectivity over hSGLT1. IC50 value: 2.2 nM Target: SGLT2 Canagliflozin(JNJ 24831754ZAE; JNJ 28431754; JNJ 28431754AAA; TA 7284) is an experimental drug...
Purity: 99.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 500 mg



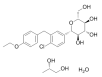
Dapagliflozin
(BMS-512148) Cat. No.: HY-10450

Bioactivity: Dapagliflozin (BMS-512148) is a sodium-glucose co-transporter 2 (**SGLT2**) inhibitor for the treatment of type 2 diabetes.
Purity: 99.89%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



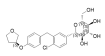
Dapagliflozin ((2S)-1,2-propanediol, hydrate)
(BMS-512148 (2S)-1,2-propanediol, hydrate) Cat. No.: HY-10450A

Bioactivity: Dapagliflozin (2S)-1,2-propanediol, hydrate is the S-enantiomer of Dapagliflozin 1,2-propanediol, hydrate. Dapagliflozin inhibits sodium/glucose cotransporter 2 (**SGLT2**), which results in excretion of glucose into the uri...
Purity: 99.61%
Clinical Data: Phase 4
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg



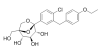
Empagliflozin
(BI 10773) Cat. No.: HY-15409

Bioactivity: Empagliflozin is a selective sodium glucose cotransporter-2 (**SGLT-2**) inhibitor with an **IC_{50}** of 3.1 nM for human SGLT-2.
Purity: 99.91%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g, 5 g, 10 g



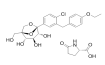
Ertugliflozin
(PF-04971729) Cat. No.: HY-15461

Bioactivity: Ertugliflozin (PF-04971729) is a potent, selective and orally active inhibitor of the sodium-dependent glucose cotransporter 2 (SGLT2), with an IC_{50} of 0.877 nM for h-SGLT2 [1]. A drug for the treatment of type 2 diabetes mellitus [2].
Purity: 99.80%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



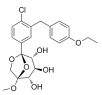
Ertugliflozin L-pyroglutamic acid
(PF-04971729 L-pyroglutamic acid) Cat. No.: HY-15461A

Bioactivity: Ertugliflozin (PF-04971729) L-pyroglutamic acid is a potent, selective and orally active inhibitor of the sodium-dependent glucose cotransporter 2 (SGLT2), with an IC_{50} of 0.877 nM for h-SGLT2 [1]. A drug for the treatment of type 2 diabe...
Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg



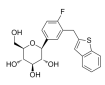
HSK0935
(HSK-0935; HSK 0935) Cat. No.: HY-101782

Bioactivity: HSK0935 is a potent, highly selective and orally available **SGLT2** inhibitor with an **IC_{50}** of 1.3 nM. Antihyperglycemic activities [1].
Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg



Ipragliflozin
(ASP1941) Cat. No.: HY-14894

Bioactivity: Ipragliflozin (ASP1941) is a highly potent and selective SGLT2 inhibitor with IC50 of 2.8 nM; little and NO potency for SGLT1/3/4/5/6. IC50 value: 2.8 nM [1][2] Target: SGLT2 in vitro: Ipragliflozin potently and selectively inhibited human, rat, and mouse SGLT2 at nanomolar ranges and exhibited...
Purity: 98.67%
Clinical Data: Phase 4
Size: 5 mg, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

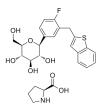


Ipragliflozin L-Proline

Cat. No.: HY-14894A

Bioactivity: Ipragliflozin (L-Proline) is a highly potent and selective **SGLT2** inhibitor with an $\mathbf{IC_{50}}$ of 2.8 nM; little and NO potency for SGLT1/3/4/5/6.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg



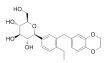
Licogliflozin

(LIK066)

Cat. No.: HY-109092

Bioactivity: Licogliflozin is a sodium glucose cotransporter (**SGLT1** and **SGLT2**) inhibitor.

Purity: 98.53%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



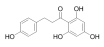
Phloretin

(NSC 407292; RJC 02792)

Cat. No.: HY-N0142

Bioactivity: Phloretin(NSC 407292; RJC 02792) is a dihydrochalcone, a type of natural phenols. Phloretin inhibits the active transport of glucose into cells by SGLT1 and SGLT2.

Purity: 99.70%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
250 mg, 500 mg



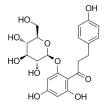
Phlorizin

(Floridzin; NSC 2833)

Cat. No.: HY-N0143

Bioactivity: Phlorizin is a non-selective **SGLT** inhibitor with $\mathbf{K_I}$s of 300 and 39 nM for **hSGLT1** and **hSGLT2**, respectively. Phlorizin is also a $\mathbf{Na^+/K^+}$**-ATPase** inhibitor.

Purity: 95.33%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
1 g, 5 g



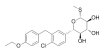
Sotagliflozin

(LX-4211; LP-802034)

Cat. No.: HY-15516

Bioactivity: Sotagliflozin (LX-4211) is a potent dual SGLT2/1 inhibitor. Antidiabetic agents.

Purity: 99.89%
Clinical Data: Phase 3
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg



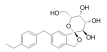
Tofogliflozin

(CSG452)

Cat. No.: HY-14902

Bioactivity: Tofogliflozin(CSG-452) is a potent and highly specific sodium/glucose cotransporter 2(SGLT2) inhibitor with Ki values of 2.9, 14.9, and 6.4 nM for human, rat, and mouse SGLT2.

Purity: >98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg



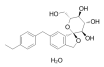
Tofogliflozin hydrate

(CSG-452 hydrate)

Cat. No.: HY-13413

Bioactivity: Tofogliflozin(CSG-452) hydrate is a potent and highly specific sodium/glucose cotransporter 2(SGLT2) inhibitor with Ki values of 2.9, 14.9, and 6.4 nM for human, rat, and mouse SGLT2.

Purity: 99.41%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



Velagliflozin

Cat. No.: HY-109018

Bioactivity: Velagliflozin is an orally available sodium-glucose cotransporter 2 (**SGLT2**) inhibitor, with anti-diabetic activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg