GLUT

Glucose transporter

GLUTs (Glucose transporters) are proteins comprising 12 membrane-spanning regions. GLUTs transport glucose across the plasma membrane by means of a facilitated diffusion mechanism.

GLUT1 (SLC2A1), a uniporter protein, facilitates the transport of glucose across the plasma membranes of mammalian cells. GLUT2 (SLC2A2) is a transmembrane carrier protein that enables protein facilitated glucose movement across cell membranes. GLUT3 (SLC2A3), mainly present in the brain, has high affinity for glucose. GLUT3 facilitates the transport of glucose across the plasma membranes of mammalian cells. GLUT4 (SLC2A4) is found in the heart, skeletal muscle, adipose tissue, and brain. GLUT4 is an insulin-responsive glucose transporter.

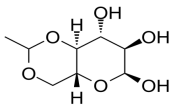
GLUT Inhibitors & Activators

4,6-O-Ethylidene-α-D-glucose

(Ethylidene-glucose)

Cat. No.: HY-N7433

4,6-O-ethylidene-α-D-glucose (Ethylidene-glucose), a glucose derivative, is a competitive exofacial binding-site inhibitor on **glucose transporter 1 (GLUT1)** with a K_i of 12 mM for wild-type 2-deoxy-D-glucose transport.

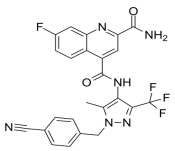


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

BAY-876

Cat. No.: HY-100017

BAY-876 is an orally active and selective **glucose transporter 1 (GLUT1)** inhibitor with an IC_{50} of 2 nM. BAY-876 is >130-fold more selective for GLUT1 than GLUT2, GLUT3, and GLUT4. BAY-876 is also a potent blocker of glycolytic metabolism and ovarian cancer growth.

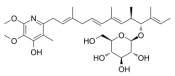


Purity: 98.46%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

Glucopiericidin A

Cat. No.: HY-133541

Glucopiericidin A is a natural piericidin compound obtained from a marine-derived Streptomyces strain. Glucopiericidin A serves as a **glucose transporter (GLUT)** chemical probe and suppresses glycolysis.



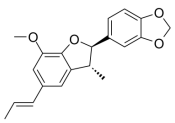
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Licarin B

((-)-Licarin B)

Cat. No.: HY-N0479

Licarin B, a nitric oxide production inhibitor extracted from the component of the seeds of Myristica fragrans, improves insulin sensitivity via **PPARγ** and activation of GLUT4 in the IRS-1/PI3K/AKT pathway.



Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

MOTS-c(human) acetate

Cat. No.: HY-P2048A

MOTS-c(human) acetate is a mitochondrial-derived peptide. MOTS-c(human) acetate induces the accumulation of AMP analog **AICAR**, increases activation of **AMPK** and expression of its downstream **GLUT4**.

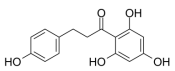
Purity: 99.57%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg, 100 mg

Phloretin

(NSC 407292; RJC 02792)

Cat. No.: HY-N0142

Phloretin (NSC 407292; RJC 02792) is a flavonoid extracted from Prunus mandshurica, has anti-inflammatory activities. Phloridzin is a specific, competitive and orally active inhibitor of **sodium/glucose cotransporters** in the intestine (SGLT1) and kidney (SGLT2).

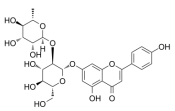


Purity: 99.78%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 250 mg, 500 mg

Rhoifolin

Cat. No.: HY-N0755

Rhoifolin is a flavone glycoside isolated from Citrus grandis (L.) Osbeck leaves. Rhoifolin is beneficial for diabetic complications through enhanced adiponectin secretion, tyrosine phosphorylation of **insulin receptor-β** and **glucose transporter 4 (GLUT 4)** translocation.

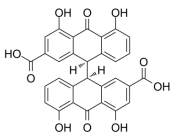


Purity: 99.24%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 20 mg

Sennidin A

Cat. No.: HY-N6936

Sennidin A, isolated from the leaves of Cassia angustifolia, inhibits **HCV NS3 helicase**, with an IC_{50} of 0.8 μM. Sennidin A induces phosphorylation of Akt and glucose transporter 4 (GLUT4) translocation. Sennidin A stimulates the glucose incorporation.

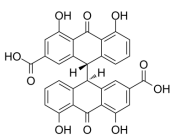


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

Sennidin B

Cat. No.: HY-N6935

Sennidin B, a stereoisomer isolated from the leaves of Cassia angustifolia, has lower activity than Sennidin A. Sennidin A inhibits **HCV NS3 helicase**, with an IC_{50} of 0.8 μM. Sennidin A induces phosphorylation of Akt and glucose transporter 4 (GLUT4) translocation.

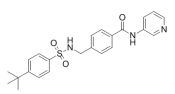


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

STF-31

Cat. No.: HY-18728

STF-31 is a selective inhibitor of **glucose transporter 1 (GLUT1)**, with an IC_{50} of 1μM.



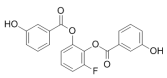
Purity: 96.62%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

WZB117

Cat. No.: HY-19331

WZB117 is a **glucose transporter 1** (**Glut1**) inhibitor, which downregulates glycolysis, induces cell-cycle arrest, and inhibits cancer cell growth in vitro and in vivo.



Purity: 99.97%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg