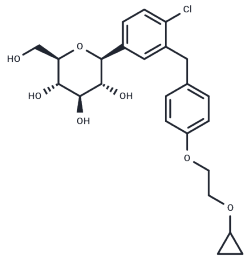
Data Sheet (Cat.No.T7217)

TargetMol

Bexagliflozin

Chemical Properties



CAS No. : 1118567-05-7

Formula: C24H29ClO7

Molecular Weight: 464.94

Storage: Keep away from direct sunlight,Keep away from moisture,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Bexagliflozin (EGT1442) is a potent, selective sodium glucose co-transporter 2 (SGLT2) inhibitor with IC50 values of 2 nM for human SGLT2 and 5.6 μM for human SGLT1.
Targets(IC50)	SGLT
In vivo	EGT1442 produces a stable urinary excretion of glucose in rats and dogs with ED50 values of 0.38 and 0.09 mg/kg, respectively, and reduces HbA(1c) and blood glucose in db/db mice in a concentration dependent manner.
Animal Research	Prior to experiment initiation, 7-week old SHRSP rats were assigned to 3 groups of 15 males each, based on body weights. During this week, daily water consumption was determined in order to calculate appropriate drug concentrations for the drinking water. The following week (Day 1), rats were switched to a stroke-promoting diet containing reduced potassium and protein and elevated NaCl. Animals received water bottles containing either no compound, EGT1442 (3.0 mg/kg) or the sodium channel blocker amiloride (1.0 mg/kg). Body weights were measured 2 times per week, and dosages were adjusted weekly. Water consumption was likewise measured 2 times per week, while food consumption wasmeasured weekly. Daily values were estimated. Urine samples were analyzed by test strips once every two weeks. Additionally, all animals were observed twice daily and any abnormal findings were recorded.

Solubility Information

Solubility	DMSO: 147.5 mg/mL (317.25 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (21.51 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (21.51 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1508 mL	10.7541 mL	21.5082 mL
5 mM	0.4302 mL	2.1508 mL	4.3016 mL
10 mM	0.2151 mL	1.0754 mL	2.1508 mL
50 mM	0.043 mL	0.2151 mL	0.4302 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhang W , Welihinda A , Mechanic J , et al. EGT1442, a potent and selective SGLT2 inhibitor, attenuates blood glucose and HbA1c levels in db/db mice and prolongs the survival of stroke-prone rats[J]. Pharmacological Research, 2011, 63(4):284-293.