Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Dapagliflozin

Catalog No: tcsc0781

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
461432-26-8

Formula:
$C_{21}H_{25}ClO_6$

Pathway:
Membrane Transporter/Ion Channel

Target:
SGLT

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (244.58 mM)

Alternative Names:
BMS-512148

Observed Molecular Weight:
408.87

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Product Description

Dapagliflozin (BMS-512148) is a sodium-glucose co-transporter 2 (**SGLT2**) inhibitor for the treatment of type 2 diabetes.

IC50 & Target: SGLT2[1]

In Vitro: Dapagliflozin pretreatment of hypoxic HK2 cells significantly improves the cell viability in a dose-dependent manner. Dapagliflozin decreases Bax expression, the Bax/Bcl2 ratio, and PARP expression in hypoxic HK2 cells[2].

In Vivo: At 11 mM glucose, dapagliflozin raises glucagon release from 18% to 32% of control, while the effect of dapagliflozin addition is minor at 1 mM glucose. At the intermediate glucose concentration of 6 mM, glucagon secretion is estimated to be 24% and 30% of control in the absence or presence of dapagliflozin, respectively[1]. Dapagliflozin pretreatment significantly reduces the number of TUNEL-positive cells in IR-injured kidneys. Dapagliflozin pretreatment significantly elevates the HIF1 expression in IR-injured renal tubular cells from mice[2]. Dapagliflozin (10 mg/kg, o.p.) causes a marked increase in urinary glucose in SGLT2i-mice. Dapagliflozin acutely suppresses BAT thermogenesis by reducing sympathetic nerve activity. Dapagliflozin enhances hepatic gluconeogenesis and glycogenolysis[3].