Web: www.taiclone.com
Tel: +886-2-2735-9682
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PTC-209

Catalog No: tcsc3023

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
315704-66-6

Formula:
$C_{17}H_{13}Br_2N_5OS$

Pathway:
Autophagy

Target:
Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 32 mg/mL (64.62 mM)

Observed Molecular Weight:
495.19

Product Description

PTC-209 is a specific **BMI-1** inhibitor with **IC_{50}** of 0.5 μM in both GEMS reporter and ELISA assays.

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IC50 & Target: IC50: 0.5 μM (BMI-1, in HT1080 tumor cells)[1]

In Vitro: PTC-209 is a recently developed inhibitor of BMI1, in biliary tract cancer (BTC) cells. PTC-209 reduces overall viability in BTC cell lines in a dose-dependent fashion (0.04-20 μM). Treatment with PTC-209 leads to slightly enhanced caspase activity and stop of cell proliferation. Cell cycle analysis reveals that PTC-209 causes cell cycle arrest at the G1/S checkpoint[2]. PTC-209 (100, 200, or 500 nM) decreases BMI1 and increases p16 protein expression in canine OSA cell lines. Compare to vehicle control, BMI1 protein expression decreases by 40% and 25% in the Abrams and D17 cell lines, respectively, following 500 nM PTC-209 treatment. In the Moresco cell line, BMI1 protein expression decreases by 16% and 39% following 200 nM and 500 nM PTC-209 treatment, respectively, as compared to vehicle control. Increases in p16 protein levels can be observed in all cell lines beginning at 100 nM PTC-209 and are highest at the 500 nM PTC-209 dose for Abrams (120% increase) and Moresco (200% increase), but appeares to top out at 200 nM for the D17 cell line (54% increase)[3].

In Vivo: Pharmacokinetic analysis demonstrates that PTC-209 (60 mg/kg, subcutaneously once a day) effectively inhibits BMI-1 production in tumor tissue in vivo. Inhibition of BMI-1 with PTC-209 halts growth of preestablished tumors in vivo[1].