

# 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 :  $\geq 32$  mg/mL (64.62 mM)

**Observed Molecular Weight:**

495.19

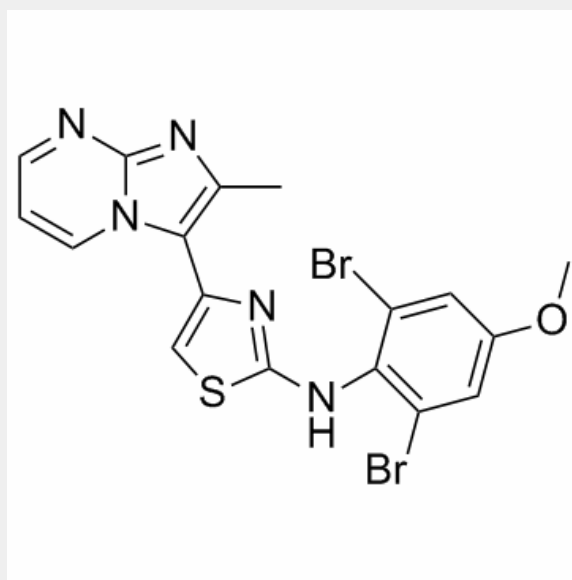
## Product Description

PTC-209 is a specific **BMI-1** inhibitor with **IC<sub>50</sub>** of 0.5  $\mu$ M in both GEMS reporter and ELISA assays.

IC50 & Target: IC50: 0.5  $\mu$ M (BMI-1, in HT1080 tumor cells)<sup>[1]</sup>

**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  $\mu$ M). 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<sup>[2]</sup>. 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 appears to top out at 200 nM for the D17 cell line (54% increase)<sup>[3]</sup>.

**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<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!