



Pimasertib

Catalog No: tcsc0198

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 1236699-92-5
Formula: C ₁₅ H ₁₅ FIN ₃ O ₃
Pathway: MAPK/ERK Pathway
Target: MEK
Purity / Grade: >98%
Solubility: DMSO : ≥ 100 mg/mL (231.91 mM)
Alternative Names: AS703026;MSC1936369B
Observed Molecular Weight: 431.2





Product Description

Pimasertib (AS703026) is a highly selective, potent, ATP non-competitive allosteric inhibitor of MEK1/2, used for cancer treatment.

In Vitro: Pimasertib (5, 0.5, and 0.1 μ M) specifically blocks ERK1/2 activation in MM cells, cultured alone or with BMSCs. Pimasertib inhibits the growth of MM cell lines in a dose-dependent manner, with IC₅₀s ranging from 0.005 to 2 μ M. The IC₅₀s of Pimasertib against INA-6, U266, H929 cells are 10 nM, 5 nM, 200 nM respectively. Pimasertib induces apoptosis and modulates the cell cycle profile. Pimasertib targets MM cells in the BM microenvironment^[1]. Pimasertib (10 μ mol/L) inhibits ERK pathway, proliferation, and transformation in cetuximab-resistant D-MUT cells^[2]. Pimasertib in combination with PLX4032 significantly induces apoptosis of RPMI-7951 cells, whereas each drug used alone does not. Pimasertib synergizes with small interfering RNA-mediated downregulation of BRAF to produce results similar to those of combined treatment with PLX4032 and Pimasertib^[3].

In Vivo: Pimasertib (15, 30 mg/kg) significantly inhibits the growth of tumor in the human H929 MM xenograft model in CB17 SCID mice^[1]. Pimasertib (10 mg/kg, p.o.) inhibits tumor growth of cetuximab-resistant tumor attributed by K-ras mutation^[2].

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