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

Adavosertib

Catalog No: tcsc0105

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
955365-80-7

Formula:
$C_{27}H_{32}N_8O_2$

Pathway:
Cell Cycle/DNA Damage

Target:
Wee1

Purity / Grade:
>98%

Solubility:
DMSO : 18.75 mg/mL (37.46 mM; Need ultrasonic)

Alternative Names:
AZD1775;MK-1775

Observed Molecular Weight:
500.6

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Product Description

Adavosertib (AZD-1775; MK-1775) is a potent **Wee1** inhibitor with an **IC_{50}** of 5.2 nM.

IC50 & Target: IC50: 5.2 nM (Wee1)

In Vitro: Adavosertib (MK-1775) enhances the cytotoxic effects of 5-FU in p53-deficient human colon cancer cells. Adavosertib (MK-1775) inhibits CDC2 Y15 phosphorylation in cells, abrogates DNA damaged checkpoints induced by 5-FU treatment, and causes premature entry of mitosis determined by induction of Histone H3 phosphorylation[1]. Adavosertib (MK-1775) abrogates the radiation-induced G2 block in p53-defective cells but not in p53 wild-type lines[2]. The combination of gemcitabine with Adavosertib (MK-1775) produces robust anti-tumor activity and remarkably enhances tumor regression response (4.01 fold) compared to gemcitabine treatment in p53-deficient tumors[3].

In Vivo: In vivo, Adavosertib (MK-1775) potentiates the anti-tumor efficacy of 5-FU or its prodrug, capecitabine, at tolerable doses[1]. Adavosertib (MK-1775) (60 mg/kg twice daily, p.o.) enhances H1299 xenograft tumor response to fractionated radiotherapy[2]. Adavosertib (MK-1775) (30 mg/kg. p.o.) regresses tumor growth in PANC198, PANC215 and PANC185 as compared to GEM treated mice[3].