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

VE-821

Catalog No: tcsc0238

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1232410-49-9

Formula:
$C_{18}H_{16}N_4O_3S$

Pathway:
Cell Cycle/DNA Damage;PI3K/Akt/mTOR

Target:
ATM/ATR;ATM/ATR

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
368.41

Product Description

VE-821 is a potent ATP-competitive inhibitor of **ATR** with **K_i/IC_{50}** of 13 nM/26 nM.

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IC50 & Target: Ki: 13 nM (ATR)[1]

IC50: 26 nM (ATR)[2]

In Vitro: VE-821 shows excellent selectivity for ATR with minimal cross-reactivity against the related PIKKs ATM, DNA-PK, mTOR and PI3Kγ (K_is of 16 μM, 2.2 μM, >1 μM and 3.9 μM, respectively) and against a large panel of unrelated protein kinases[1]. VE-821 (compound 27) also inhibits ATM and DNA-PK wirh IC_{50} of >8 μM, and 4.4 μM, respectively[2]. VE-821 significantly enhances the sensitivity of PSN-1, MiaPaCa-2 and primary PancM pancreatic cancer cells to radiation and Gemcitabine under both normoxic and hypoxic conditions. ATR inhibition by VE-821 leads to inhibition of radiation-induced G_2/M arrest in cancer cells. In both PSN-1 and MiaPaCa-2 cells, 1 μM VE-821 inhibits phosphorylation of Chk1 (Ser 345) after treatment with Gemcitabine (100 nM), radiation (6 Gy) or both, at 2 h post-irradiation[3].