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

CGK733

Catalog No: tcsc1322

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
905973-89-9

Formula:
$C_{23}H_{18}Cl_3FN_4O_3S$

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

Target:
ATM/ATR;ATM/ATR

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (179.91 mM)

Observed Molecular Weight:
555.84

Product Description

CGK733 is a potent **ATM/ATR** inhibitor, used for the research of cancer.

IC50 & Target: ATM/ATR[1]

In Vitro: CGK733 (4.2 ng/μL-12.5 ng/μL) enhances taxol-induced cytotoxicity in HBV-positive HCC cells. CGK733 (4.2 ng/μL) accelerates the formation of multinucleated cells and promotes the exit of mitosis in taxol-treated HBV-positive HCC cells[1]. CGK733

(10 μM) causes the loss of cyclin D1 through the ubiquitin-dependent proteasomal degradation pathway in MCF-7 and T47D breast cancer cell lines. CGK733 (0.6-40 μM) shows inhibitory activities against proliferation of LnCap prostate cancer cells, HCT116 colon cancer cells, MCF-7 and T47D estrogen receptor positive breast cancer cells, and MDA-MB436 ER negative breast cancer cells. Moreover, CGK733 inhibits proliferation of non-transformed mouse BALB/c 3T3 embryonic fibroblast cells. In addition, CGK733 (10 μM) inhibits MCF-7 proliferation, and the effect can not be suppressed by pan-caspase inhibition[2]. CGK733 (10 μM) results in 1.6-fold increase in ATM reporter activity in HEK-293 cells[3].

In Vivo: CGK733 (25 mg/kg, i.p.) increases the ATM reporter activity (reports inactivation of ATM kinase activity) compared to control mice, with 2.4-fold, 3.1-fold, and 1.3-fold changes at 1, 4, and 8 hours, respectively[3].