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

NMS-P715

Catalog No: tcsc3396

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1202055-32-0

Formula:
$C_{35}H_{39}F_3N_8O_3$

Pathway:
Cell Cycle/DNA Damage;Cytoskeleton

Target:
Mps1;Mps1

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
676.73

Product Description

NMS-P715 is a selective, ATP-competitive inhibitor of **MPS1**, with an **IC_{50}** of 182 nM.

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IC50 & Target: IC50: 182 nM (MPS1)[1]

In Vitro: NMS-P715 is a selective inhibitor of MPS1, with an IC_{50} of 182 nM. NMS-P715 is highly specific for MPS1, with no other kinases inhibited below an IC_{50} value of 5 μM and only 3 kinases inhibited below 10 μM (CK2, MELK, and NEK6). NMS-P715 promotes massive spindle assembly checkpoint (SAC) override with an EC_{50} of 65 nM. NMS-P715 (1 μM) causes mitotic acceleration in U2OS cells overexpressing YFP-α-tubulin, induces aneuploidy and inhibits the proliferation of HCT116 cells. NMS-P715 (0.5, 1 μM) affects mitotic checkpoint complex (MCC) stability and cdc20 ubiquitylation[1]. NMS-P715 (1 μM) exhibits bypass of the spindle assembly checkpoint and apoptosis in pancreatic ductal adenocarcinoma (PDAC) cell lines. NMS-P715 (0-25 μM) also selectively inhibits growth of PDAC cells[2].

In Vivo: NMS-P715 (10 mg/kg) exhibits an oral bioavailability of 37% and good pharmacokinetic properties in nude mice bearing subcutaneous implanted human tumor cell xenografts. NMS-P715 (90 mg/kg, p.o.) is well tolerated and cuases no signs of body weight loss or other overt toxicities in an A2780 ovary carcinoma xenograft model. NMS-P715 (100 mg/kg, p.o.) inhibits the tumor growth by appr 43% in the A375 melanoma xenograft model[1].