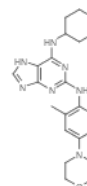


Product Name : MPI-0479605
Synonyms : MPI0479605; MPI 0479605; MPI-0479605
Cat No. : M17216
CAS Number : 1246529-32-7
Molecular Formula : C₂₂H₂₉N₇O
Formula Weight : 407.51
Chemical Name : N6-cyclohexyl-N2-(2-methyl-4-morpholinophenyl)-9H-purine-2,6-diamine



Description : MPI-0479605 is a potent and selective ATP competitive inhibitor of Mps1. Cells treated with MPI-0479605 undergo aberrant mitosis, resulting in aneuploidy and formation of micronuclei. In cells with wild-type p53, this promotes the induction of a postmitotic checkpoint characterized by the ATM- and RAD3-related-dependent activation of the p53-p21 pathway. In both wild-type and p53 mutant cells lines, there is a growth arrest and inhibition of DNA synthesis. Subsequently, cells undergo mitotic catastrophe and/or an apoptotic response. In xenograft models, MPI-0479605 inhibits tumor growth, suggesting that drugs targeting Mps1 may have utility as novel cancer therapeutics.

Pathway : Endocrinology/Hormones

Target : CaMK

Receptor : Mps1

Solubility : DMSO : 11 mg/mL. 26.99 mM;

SMILES : n1c(nc(c2c1[nH]cn2)NC1CCCCC1)Nc1c(cc(cc1)N1CCOCC1)C

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

I.Tardif K D. et al. Molecular Y therapeutics, 2011, 10(12): 2267-2275.