

MPI-0479605

Chemical Properties

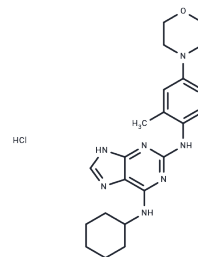
CAS No. : 1246529-32-7

Formula: C₂₂H₂₉N₇O

Molecular Weight: 407.51

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	MPI-0479605 is an ATP competitive and selective inhibitor.
Targets(IC50)	Apoptosis,Kinesin
In vitro	In a panel of tumor cell lines, MPI-0479605 caused a significant reduction in cell viability with a GI50 ranging from 30 to 100 nM. In addition, MPI-0479605 induced cell growth arrest and ultimately cell death through apoptosis or mitotic damage. chromosome segregation defects and alloploidy.
In vivo	In a panel of tumor cell lines, MPI-0479605 caused a significant reduction in cell viability with a GI50 ranging from 30 to 100 nM. In addition, MPI-0479605 induced cell growth arrest and ultimately cell death through apoptosis or mitotic damage. chromosome segregation defects and alloploidy.
Kinase Assay	In Vitro Kinase Assays and Selectivity Screening : To measure Mps1 activity, 25 ng of recombinant, full-length enzyme is incubated in reaction buffer (50 mM Tris-HCl pH 7.5, 10 mM MgCl ₂ , 0.01% Triton X-100 and 5 μM Myelin basic protein (MBP)) containing vehicle (DMSO alone) or inhibitors. Forty μM ATP (2xKm) is added with 1 μCi [γ-33P]ATP and the reaction is incubated at room temperature for 45 minutes. Reactions are terminated with 3% phosphoric acid and transferred to P81 filter plates. Samples are washed in 1% phosphoric acid and 33P radioactivity is measured on a TopCount scintillation reader. In-house kinase assays are all carried out at 2xKm ATP concentrations. MPI-0479605 (500 nM) is also screened against a larger kinase panel.
Cell Research	Cells are treated for 3 or 7 days with various concentrations of MPI-0479605 and the GI50 is determined. Cell viability is measured with CellTiter-Glo. (Only for Reference)

Solubility Information

Solubility	DMSO: 1 mg/mL (2.45 mM),Sonication is recommended. Ethanol: 2 mg/mL (4.91 mM),Heating is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4539 mL	12.2696 mL	24.5393 mL
5 mM	0.4908 mL	2.4539 mL	4.9079 mL
10 mM	0.2454 mL	1.227 mL	2.4539 mL
50 mM	0.0491 mL	0.2454 mL	0.4908 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Tardif KD, et al. Mol Cancer Ther. 2011, 10(12), 2267-2275.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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