# Data Sheet (Cat.No.T2313)



### MPI-0479605

## **Chemical Properties**

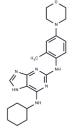
CAS No.: 1246529-32-7

Formula: C22H29N7O

Molecular Weight: 407.51

Appearance: no data available

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



## **Biological Description**

Description	MPI-0479605 is an ATP competitive and selective inhibitor.
Targets(IC50)	Apoptosis, Kinesin
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 MgCl2, 0.01% Triton X-100 and 5 $\mu$ M Myelin basic protein (MBP)) containing vehicle (DMSO alone) or inhibitors. Forty $\mu$ M ATP (2xKm) is added with 1 $\mu$ Ci [ $\gamma$ -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: 58 mg/mL (142.3 mM),	
	Ethanol: 2 mg/mL (4.9 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.

#### Reference

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

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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