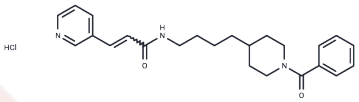
Data Sheet (Cat.No.T22785)

TargetMol

Daporinad hydrochloride

Chemical Properties



CAS No. : 1785666-54-7

Formula: C24H30ClN3O2

Molecular Weight: 427.97

Storage: Store at low temperature
Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Daporinad hydrochloride (FK 866 hydrochloride) is a potent nicotinamide-phosphate ribosyltransferase (NAMPT) inhibitor with potential anti-tumor and anti-angiogenic activity that induces apoptosis in tumor cells.Daporinad hydrochloride can be used in the study of inflammation and cancer.
Targets(IC50)	Apoptosis,NAMPT
In vitro	**METHODS**: RPMI8226/S, U266 and MM1S cells were treated with FK866 (10nM, 24-48 hours) to study the effect of Nampt inhibitor on MAPK signaling pathway in MM cells. **RESULTS**: FK866 significantly reduced the gene and protein levels of pERK1/2, pp38MAPK and pSAPK/JNK, indicating that the drug has an effective inhibitory effect on MEK/ERK signaling. [1]
In vivo	**METHODS**: CB17-SCID mice injected with MM1S cells were treated with FK866 (30 mg/kg, intraperitoneal injection, twice a day, for 4 days) once a week for 3 weeks. Caliper measurements of the longest perpendicular tumor diameter were taken twice a week, and excised tumors were collected from mice for Western blot analysis to assess ERK and LC3B phosphorylation. **RESULTS**: A significant reduction in tumor burden was observed on day 7 of FK866 treatment, the treatment was well tolerated, without significant weight loss or neurological changes, and resulted in a significant prolongation of overall survival; tumor tissues from FK866-treated mice showed a significant reduction in ERK phosphorylation and LC3 proteolytic cleavage. [1]

Solubility Information

Solubility	DMSO: 10 mg/mL (23.37 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3366 mL	11.6831 mL	23.3661 mL
5 mM	0.4673 mL	2.3366 mL	4.6732 mL
10 mM	0.2337 mL	1.1683 mL	2.3366 mL
50 mM	0.0467 mL	0.2337 mL	0.4673 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

Cea M, et al. Targeting NAD+ salvage pathway induces autophagy in multiple myeloma cells via mTORC1 and extracellular signal-regulated kinase (ERK1/2) inhibition. Blood. 2012 Oct 25;120(17):3519-29.