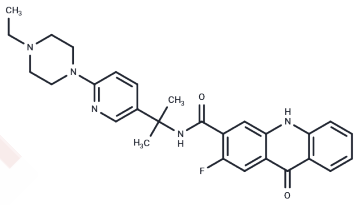
Data Sheet (Cat.No.T63246)

TargetMol

BMS-566419

Chemical Properties



CAS No. : 566161-24-8

Formula: C28H30FN5O2

Molecular Weight: 487.57

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	BMS-566419 is an acridone-based inhibitor of inosine 5'-monophosphate dehydrogenase, a rate-limiting enzyme in de novo guanosine nucleotide biosynthesis, and through suppression of lymphocyte proliferation it has demonstrated clinical utility as a research compound for investigating immunosuppression mechanisms and therapeutic strategies in transplant rejection.
Targets(IC50)	Dehydrogenase
In vitro	In enzymatic assays, BMS-566419 specifically inhibited human IMPDH II with an IC50 of approximately 10 nM [1].
In vivo	In a rat model of Collagen-Induced Arthritis (CIA), oral administration of BMS-566419 reduced joint inflammation and disease progression. Pharmacokinetic studies demonstrated oral bioavailability for the compound [1].

Solubility Information

Solubility	DMSO: 10 mg/mL (20.51 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.051 mL	10.2549 mL	20.5099 mL
5 mM	0.4102 mL	2.051 mL	4.102 mL
10 mM	0.2051 mL	1.0255 mL	2.051 mL
50 mM	0.041 mL	0.2051 mL	0.4102 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

Watterson SH, et al. Acridone-based inhibitors of inosine 5'-monophosphate dehydrogenase: discovery and SAR leading to the identification of N-(2-(6-(4-ethylpiperazin-1-yl)pyridin-3-yl)propan-2-yl)-2- fluoro-9-oxo-9,10-dihydroacridine-3-carboxamide (BMS-566419). J Med Chem. 2007;50(15):3730-3742.