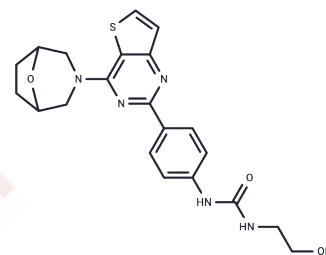


mTOR inhibitor 9d

Chemical Properties

CAS No. :	1144075-38-6
Formula:	C ₂₁ H ₂₃ N ₅ O ₃ S
Molecular Weight:	425.5
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	mTOR inhibitor 9d is a dual inhibitor of the protein kinases mTOR and PI3K with an mTOR IC50 value of 0.31 nm, and can be used for the treatment of leukemia, skin cancer, breast cancer, lung cancer and colon cancer.
Targets(IC50)	mTOR,PI3K
In vitro	mTOR inhibitor 9d (compound 9d) inhibitory concentration against the proliferation of human prostate cancer LNCaP cell line by cellular proliferation assay with IC50 is 180 nM.[2]

Solubility Information

Solubility	DMSO: 45 mg/mL (105.76 mM),Sonication 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	2.3502 mL	11.7509 mL	23.5018 mL
5 mM	0.470 mL	2.3502 mL	4.7004 mL
10 mM	0.235 mL	1.1751 mL	2.3502 mL
50 mM	0.047 mL	0.235 mL	0.470 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

Zask, et al. Preparation of thienopyrimidine and pyrazolopyrimidine compounds and their use as mTOR kinase and PI3 kinase inhibitors. US20090098086 A1.

Verheijen JC, et al. Discovery of 2-arylthieno[3,2-d]pyrimidines containing 8-oxa-3-azabi-cyclo[3.2.1]octane in the 4-position as potent inhibitors of mTOR with selectivity over PI3K. Bioorg Med Chem Lett. 2010;20(1):375-379.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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