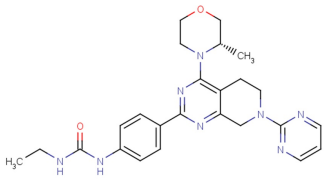
Data Sheet (Cat.No.T12123)

TargetMol
A DRUG SCREENING EXPERT

mTOR inhibitor-3

Chemical Properties



CAS No.:	1207358-59-5
Formula:	C25H30N8O2
Molecular Weight:	474.56
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	mTOR inhibitor-3 is an inhibitor of remarkably selective mTOR (Ki : 1.5 nM)
Targets(IC_{50})	mTOR: 1.5 nM (ki)
In vitro	mTOR inhibitor-3 is an mTOR inhibitsor(Ki of 1.5 nM), 500-fold selectivity over closely related PI3 kinases. mTOR inhibitor-3 inhibits NCI-PC3 and MCF7neo/Her2 cells proliferation with IC50s of 150 nM and 57 nM, respectively[2].
In vivo	mTOR inhibitor-3 achieves tumor stasis at the highest 200 mg/kg/day dose examined, which appears to also be approaching the limit of tolerability for this molecule. Plasma levels of mTOR inhibitor-3 6 h following oral administration in PC3 tumor-bearing mice along with the fold decreases of phosphorylated mTORC1 and -2 substrates relative to time-matched vehicle controls. mTOR inhibitor-3 has moderate terminal elimination half-life (t1/2=1.7 h for mouse(1 mg/kg, iv)) [2].

Solubility Information

Solubility	DMSO: 50 mg/mL (105.36 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.107 mL	10.536 mL	21.072 mL
5 mM	0.421 mL	2.107 mL	4.214 mL
10 mM	0.211 mL	1.054 mL	2.107 mL
50 mM	0.042 mL	0.211 mL	0.421 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Pei Z, et al. Discovery and Biological Profiling of Potent and Selective mTOR Inhibitor GDC-0349. ACS Med Chem Lett. 2012 Nov 29;4(1):103-7.

2. Koehler MF, et al. Potent, selective, and orally bioavailable inhibitors of the mammalian target of rapamycin kinase domain exhibiting single agent antiproliferative activity. J Med Chem. 2012 Dec 27;55(24):10958-71.

Inhibitors · Natural Compounds · Compound Libraries

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481