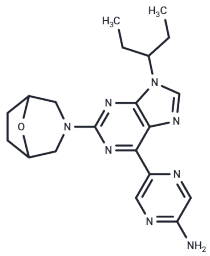
Data Sheet (Cat.No.T11328)

TargetMol

FT-1518

Chemical Properties



CAS No. : 1313026-58-2

Formula: C20H26N8O

Molecular Weight: 394.47

Storage: Store at low temperature
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	FT-1518 is an orally available, selective and potent mTORC1 and mTORC2 inhibitor with anticancer and antitumor activity for cancer research.
Targets(IC50)	mTOR
In vitro	FT-1518 depicted very good growth inhibitory activity across a large panel of hematologic and solid tumor cell lines with most activities falling into low nanomolar range. mTOR kinase inhibition in cells, by FT-1518, resulted in more potent inhibition of the mTOR pathway biomarkers (mTORC 1 & 2 biomarkers [pAkt(S473) and pS6(S240/244) or p70 S6K), no inhibition of PI3K biomarker [pAkt(T308)], and improved anti-proliferative activity as compared with rapamycin. [1]
In vivo	FT-1518 showed high sustained tumor exposure and target Inhibition in a single oral dose xenograft model. FT-1518 exhibited dose-dependent and higher tumor growth inhibition (TGI) in multiple solid tumor xenografts compared with rapalogs and is poised to enter the clinic with a favorable toxicology profile. [1]

Solubility Information

Solubility	DMSO: 2 mg/mL (5.07 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.535 mL	12.6752 mL	25.3505 mL
5 mM	0.507 mL	2.535 mL	5.0701 mL
10 mM	0.2535 mL	1.2675 mL	2.535 mL
50 mM	0.0507 mL	0.2535 mL	0.507 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

Alain C. Mita, et al. FT-1518, a new generation selective and potent mTORC1 and mTORC2 inhibitor: an in vitro and in vivo profile [abstract]. Cancer Res 2017;77(13 Suppl):Abstract nr 137.