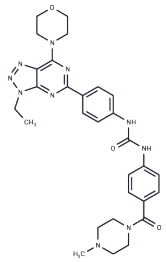
Data Sheet (Cat.No.T3656)

PKI-402

Chemical Properties



CAS No. : 1173204-81-3

Formula: C29H34N10O3

Molecular Weight: 570.65

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	PKI-402 is a potent PI3K and mTOR inhibitor. PKI-402 inhibits PI3Kα, mTOR, PI3Kβ, PI3Kδ and PI3Kγ with IC50s of 2, 3, 7, 14 and 16 nM, respectively.
Targets(IC50)	mTOR,PI3K
In vitro	PKI-402 causes in vitro growth inhibition of human tumor cell lines derived from a diverse set of human tumor tissues, including breast, brain (glioma), pancreas, and non-small cell lung cancer (NSCLC) tissues[1].
In vivo	PKI-402 exhibits antitumor efficacy via intravenous administration in breast [MDA-MB-361: Her2+ and PIK3CA (E545K)], glioma (U87MG and PTEN), and NSCLC (A549; K-Ras and STK11) xenograft models, with induced regression observed specifically in the MDA-MB-361 model.

Solubility Information

Solubility	DMSO: 4.68 mg/mL (8.2 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.47 mg/mL (0.82 mM),Suspension. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7524 mL	8.7619 mL	17.5239 mL
5 mM	0.3505 mL	1.7524 mL	3.5048 mL
10 mM	0.1752 mL	0.8762 mL	1.7524 mL
50 mM	0.035 mL	0.1752 mL	0.3505 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

Mallon R et al. Antitumor efficacy profile of PKI-402, a dual phosphatidylinositol 3-kinase/mammalian target of rapamycin inhibitor. Mol Cancer Ther. 2010 Apr;9(4):976-84.