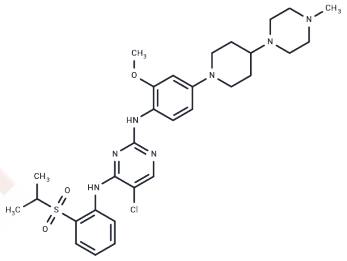
Data Sheet (Cat.No.T2251)

TargetMol

NVP-TAE 684

Chemical Properties



CAS No. : 761439-42-3

Formula: C30H40ClN7O3S

Molecular Weight: 614.2

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	NVP-TAE 684 (TAE684) is a excellently effective and specific ALK inhibitor(IC50=3 nM).
Targets(IC50)	Apoptosis,ALK
Kinase Assay	In vitro Enzyme Assays.: All in vitro enzyme assays are done at Upstate Biotechnology with the exception of InsR and IGF-1R. To determine the IC50 of TAE684 against InsR and IGF-1R a homogeneous time-resolved fluorescence assay is performed. ATP (10 mM) and 20 mg/ml biotinylated PolyEY (Glu, Tyr 4:1) are combined with 50 nL of serial dilutions of TAE684 (10-500 nM) and 4 ng of InsR enzyme in the presence of the kinase reaction buffer (20 mM Tris醋Cl, pH 7.5/10 mM MgCl2/3 mM MnCl2/1 mM DTT/10 mM NaVO4/0.1 mg/ml of BSA). Assays are incubated for 1 hour at ambient temperature. Reactions are terminated by adding 10 mL of the detection solution containing 50 mM EDTA, 500 mM KF, 0.5 mg/ml of BSA, 5 mg/mL Eu3+ cryptate-labeled anti-phosphotyrosine antibody Mab PT66-K, and 5 mg/mL Streptavidin-XLent. The reaction is incubated for half an hour, and fluorescence signals are read on Analyst GT.
Cell Research	Cells are seeded in 384-well plates (2.5×104 cells per well) and incubated with serial dilutions of TAE684 or DMSO for 2-3 days. Luciferase expression is used as a measure of cell proliferation/survival and is evaluated with the Bright-Glo Luciferase Assay System. IC50 values are generated by using XLFit software.(Only for Reference)

Solubility Information

Solubility	DMSO: 7.27 mg/mL (11.84 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6281 mL	8.1407 mL	16.2813 mL
5 mM	0.3256 mL	1.6281 mL	3.2563 mL
10 mM	0.1628 mL	0.8141 mL	1.6281 mL
50 mM	0.0326 mL	0.1628 mL	0.3256 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

Galkin AV, et al. Proc Natl Acad Sci U S A, 2007, 104(1), 270-275.
Katayama R, et al. Proc Natl Acad Sci U S A, 2011, 108(18), 7535-7540.
Schönherr C, et al, Biochem J, 2011, 440(3), 405-413.