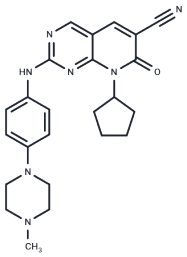
Data Sheet (Cat.No.T6920)

TargetMol

ON123300

Chemical Properties



CAS No. : 1357470-29-1

Formula: C24H27N7O

Molecular Weight: 429.52

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	ON123300 is a potent and multi-targeted kinase inhibitor for CDK4/Ark5/PDGFRβ/FGFR1/RET/Fyn (IC50: 3.9/5/26/26/9.2/11 nM).
Targets(IC50)	FGFR,c-RET,CDK,AMPK,JAK,PDGFR,Src
Kinase Assay	CDK1 kinase activity is tested by the CDK1/cyclin B complex purified from baculovirus to phosphorylate a biotinylated peptide substrate containing the consensus phosphorylation site for histone H1, which is phosphorylated in vivo by CDK1. Inhibition of CDK1 activity is measured by observing a decreased amount of 33P-γ-ATP incorporation into the immobilized substrate in streptavidin-coated 96-well scintillating microplates. CDK1 enzyme is diluted in 50 mM Tris-HCl (pH 8), 10 mM MgCl2, 0.1 mM Na3VO4, 1 mM DTT, 1% DMSO, 0.25 μM peptide, 0.1 μCi per well 33P-γ-ATP, and 5 μM ATP in the presence or absence of various concentrations of JNJ-7706621 and incubated at 30 °C for 1 hour. The reaction is terminated by washing with PBS containing 100 mM EDTA and plates are counted in a scintillation counter. IC50 is determined by Linear regression analysis of the percent inhibition by JNJ-7706621.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3282 mL	11.6409 mL	23.2818 mL
5 mM	0.4656 mL	2.3282 mL	4.6564 mL
10 mM	0.2328 mL	1.1641 mL	2.3282 mL
50 mM	0.0466 mL	0.2328 mL	0.4656 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.

Reference

Divakar SK, et al .Leukemia. 2016 Jan;30(1):86-93.
Perumal D, et al. Cancer Res. 2016 Mar 1;76(5):1225-36.
Zhang X, et al. Mol Cancer Ther. 2014 May;13(5):1105-16.