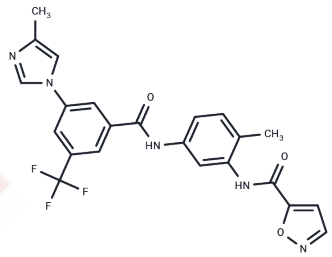
Data Sheet (Cat.No.T38511)

TargetMol

AWL-II-38.3

Chemical Properties



CAS No. : 1135205-94-5

Formula: C23H18F3N5O3

Molecular Weight: 469.42

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	AWL-II-38.3 is a highly potent EphA3 inhibitor with potent kinase inhibitory activity against EphA3 but no significant cellular activity against Src family kinases or b-raf.
Targets(IC50)	Others,Ephrin Receptor
In vitro	The structure of AWL-II-38.3 fits into the ATP-binding and substrate-binding pockets of LIMK2 and LIMK1[1]; ALW-II-38.3 forms four direct hydrogen bonds between the ATP-binding cleft of EphA3: the first between the inhibitor oxazole N and the backbone NH of the hinge residue Met702, and the second between the oxazole amide NH and the gatekeeper Thr699 between the side chain hydroxyl group, the third between the benzamide carbonyl oxygen and the main chain NH of Asp764 of the "DFG-motif", the fourth between the inhibitor benzamide NH and the side chain carboxylate necessary for catalysis Glu670 is located in the αC-helix.[2]

Solubility Information

Solubility	DMSO: 80 mg/mL (170.42 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (21.3 mM),Suspension. 10% DMSO+90% Corn oil: < 8 mg/mL (17.04 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Saline: < 8 mg/mL (17.04 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% (20% SBE-β-CD in Saline): < 8 mg/mL (17.04 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.1303 mL	10.6514 mL	21.3029 mL
5 mM	0.4261 mL	2.1303 mL	4.2606 mL
10 mM	0.213 mL	1.0651 mL	2.1303 mL
50 mM	0.0426 mL	0.213 mL	0.4261 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

Mashiach-Farkash E, et al. Computer-based identification of a novel LIMK1/2 inhibitor that synergizes with salirasib to destabilize the actin cytoskeleton. Oncotarget. 2012 Jun;3(6):629-39.
Choi Y,et al. Discovery and structural analysis of Eph receptor tyrosine kinase inhibitors. Bioorg Med Chem Lett. 2009 Aug 1;19(15):4467-70.