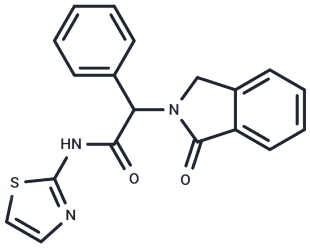
Data Sheet (Cat.No.T61191)

TargetMol

EAI001

Chemical Properties



CAS No. : 892772-75-7

Formula: C19H15N3O2S

Molecular Weight: 349.41

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	EAI001 is a potent and selective mutant epidermal growth factor receptor (EGFR) variant inhibitor that inhibits EGFRL858R/T790M with an IC50 value of 24 nM.EAI001 can be used in cancer research.
Targets(IC50)	EGFR
In vitro	EAI001 (50 μM) exhibits binding to EGFR T790M/C797S/V948R, situated deep within the EGFR near the ATP binding site and the C-helix. The inhibitory activity of EAI001 is attributed to its hydrophobic interactions with amino acids Ile759, Leu747, Leu788, Leu777, and Met766.[1]

Solubility Information

Solubility	DMSO: 90 mg/mL (257.58 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: 3.3 mg/mL (9.44 mM),Sonication is recommended. *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	2.862 mL	14.3098 mL	28.6197 mL
5 mM	0.5724 mL	2.862 mL	5.7239 mL
10 mM	0.2862 mL	1.431 mL	2.862 mL
50 mM	0.0572 mL	0.2862 mL	0.5724 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

Maity S, et, al. Advances in targeting EGFR allosteric site as anti-NSCLC therapy to overcome the drug resistance. Pharmacol Rep. 2020 Aug;72(4):799-813.
Tinivella A, et, al. Investigating the selectivity of allosteric inhibitors for mutant t790m egfr over wild type using molecular dynamics and binding free energy calculations. 2018 Dec 4;3(12):16556-62.