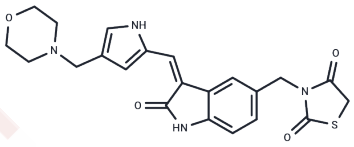
Data Sheet (Cat.No.T3274)

TargetMol

S49076

Chemical Properties



CAS No. : 1265965-22-7

Formula: C22H22N4O4S

Molecular Weight: 438.5

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	S49076 is a novel and potent inhibitor of MET, AXL/MER, and FGFR1/2/3, effectively blocking cellular phosphorylation of MET, AXL, and FGFRs.
Targets(IC50)	FGFR,c-Met/HGFR,TAM Receptor
In vitro	S49076 potently blocks cellular phosphorylation of MET, AXL, and FGFRs, inhibiting downstream signaling both in vitro and in vivo. In cell models, S49076 inhibits proliferation of MET- and FGFR2-dependent gastric cancer cells, blocks MET-driven lung carcinoma cell migration, and inhibits colony formation of hepatocarcinoma cells expressing FGFR1/2 and AXL. S49076 also inhibits viability, motility, and three-dimensional colony formation of cancer cells expressing MET, AXL, or FGFRs[1].
In vivo	S49076 shows marked antitumor activity in MET- and FGFR-dependent tumor xenografts at well-tolerated doses. S49076 has high distribution to tumors, in which the half-life for the dose of 3.125 mg/kg is approximately 7 hours versus less than 2 hours in the blood. At doses of 6.25 mg/kg and higher, more than 50% inhibition of MET phosphorylation is retained at 16 hours. S49076 is also active in a bevacizumab-resistant model and totally inhibits the growth of colon carcinoma xenografts in association with bevacizumab[1].
Cell Research	For GTL-16 and SNU-16 viability assays, cells are seeded in 96-well microplates at the appropriate density in media containing 10% FCS and supplemented 48 hours later with serial dilutions of S49076 in a final volume of 150 µL per well. After 96 hours (GTL-16) or 120 hours (SNU-16) incubation, 15 µL of a solution of 5 mg/mL MTT is added to each well and the plates are incubated for 4 hours at 37°C. The formazan metabolite is solubilized in SDS for SNU-16 and, following removal of the MTT solution, in DMSO for GTL-16. Global cell viability is estimated by measurement of optical density at 540 nm. (Only for Reference)

Solubility Information

Solubility	DMSO: 81 mg/mL (184.72 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 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 (7.53 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	2.2805 mL	11.4025 mL	22.805 mL
5 mM	0.4561 mL	2.2805 mL	4.561 mL
10 mM	0.2281 mL	1.1403 mL	2.2805 mL
50 mM	0.0456 mL	0.2281 mL	0.4561 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

Burbridge MF, et al. Mol Cancer Ther. 2013, 12(9):1749-62.