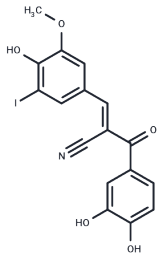
Data Sheet (Cat.No.T11593)

TargetMol

I-OMe-Tyrphostin AG 538

Chemical Properties



CAS No. : 1094048-77-7

Formula: C17H12INO5

Molecular Weight: 437.19

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	I-OMe-Tyrphostin AG 538 is a specific IGF-1R inhibitor and ATP-competitive inhibitor of PI5P4Kα (IC50: 1 μM).I-OMe-Tyrphostin AG 538 inhibits IGF-1R-mediated signaling and exhibits preferential cytotoxicity to nutrient-deficient PANC1 cells.
Targets(IC50)	IGF-1R,PI3K
In vitro	I-OMe Tyrhost AG 538 (0-3 μM; 1 hour) can prevent the phosphorylation of Akt, IGF-1R, and Erk.[1] I-OMe Tyrphostin AG 538 (0.1-1000 μM; 24 hours) has cytotoxicity on PANC-1 cells in nutrient deficient culture medium.[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (114.37 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: 2 mg/mL (4.57 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	2.2873 mL	11.4367 mL	22.8734 mL
5 mM	0.4575 mL	2.2873 mL	4.5747 mL
10 mM	0.2287 mL	1.1437 mL	2.2873 mL
50 mM	0.0457 mL	0.2287 mL	0.4575 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

Davis MI, et al. A homogeneous, high-throughput assay for phosphatidylinositol 5-phosphate 4-kinase with a novel, rapid substrate preparation. PLoS One. 2013;8(1):e54127.
Momose I, et al. Inhibitors of insulin-like growth factor-1 receptor tyrosine kinase are preferentially cytotoxic to nutrient-deprived pancreatic cancer cells. Biochem Biophys Res Commun. 2009 Feb 27;380(1):171-6.