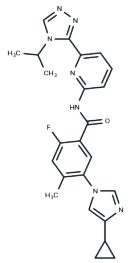
Data Sheet (Cat.No.T3350)

TargetMol

Selonsertib

Chemical Properties



CAS No. : 1448428-04-3

Formula: C24H24FN7O

Molecular Weight: 445.49

Storage: Store at low temperature
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	Selonsertib (GS-4997) is an orally bioavailable inhibitor of apoptosis signal-regulating kinase 1 (ASK1), with potential anti-inflammatory, antineoplastic and anti-fibrotic activities.
Targets(IC50)	Apoptosis,ASK,MAPK
Kinase Assay	Kinase assays mTOR.: Reagents are prepared as follows:"Simple Tor buffer": 10 mM Tris pH 7.4, 100 mM NaCl, 0.1% Tween-20, 1 mM DTT. Recombinant mTOR is diluted in this buffer to an assay concentration of 0.200ug/mL. ATP/Substrate solution: 0.075 mM ATP, 12.5 mM MnCl2, 50 mM Hepes, pH 7.4, 50 mM β-GOP, 250 nM Microcystin LR, 0.25 mM EDTA, 5 mM DTT, and 3.5 µg/mL GST-p70S6. Dilution Curve: A 10-point, 1:3 dilution of compounds are prepared in neat DMSO at 50 times the final assay concentration. Detection reagent mix: 50 mM HEPES, pH 7.4 0.01% Triton X-100, 0.01% BSA, 0.1 mM EDTA, 12.7 ug/mL Cy5-anti-GST antibody, 9 ng/ml anti-phospho p70S6 antibody (Thr389), 627ng/mL anti-mouse IgG labeled with Lance Eu. To 20 uL of the Simple Tor buffer is added 0.5 uL of the compound Dilution Curve in DMSO. The final concentration range for compound is 30 to 0.0015 µM. To initiate the reaction, 5 µL of the ATP/substrate solution is added to the above. The reaction is allowed to run for 60 minutes. The assay is stopped by adding 5 µL of 60 mM EDTA. Ten (10) µL of detection reagent mix is then added, and the mixture is allowed to sit at least 2 hours before reading on a Perkin Elmer Envision microplate reader set to detect Europium-based TR-FRET.

Solubility Information

Solubility	DMSO: 31.25 mg/mL (70.15 mM),Sonication is recommended. Ethanol: 23 mg/mL (51.63 mM),Sonication is recommended. H2O: < 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: 1 mg/mL (2.24 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*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2447 mL	11.2236 mL	22.4472 mL
5 mM	0.4489 mL	2.2447 mL	4.4894 mL
10 mM	0.2245 mL	1.1224 mL	2.2447 mL
50 mM	0.0449 mL	0.2245 mL	0.4489 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

Lin JH, et al. Nephron. 2015, 129(1):29-33.
Yuan J, Yao C, Tang J, et al. Enhanced GRP78 protein expression via the IRE1α/ASK1/p38 MAPK pathway during As2O3-induced endoplasmic reticulum stress in BEAS-2B cells. Toxicology. 2021, 462: 152962.