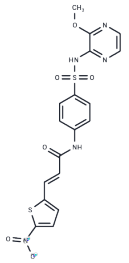
Data Sheet (Cat.No.T6904)

TargetMol

Necrosulfonamide

Chemical Properties



CAS No. : 1360614-48-7

Formula: C18H15N5O6S2

Molecular Weight: 461.47

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	Necrosulfonamide ((E)-Necrosulfonamide) is a necroptosis inhibitor that targets MLKL and is selective. Necrosulfonamide prevents the MLKL-RIP1-RIP3 necrosomal complex from interacting with its downstream effectors.
Targets(IC50)	MLK,PI3K,PI4K
In vitro	**METHODS**: FLAG-tagged RIP3-HT-29 cells were treated with Necrosulfonamide for 6 h, and the interaction between RIP1 and RIP3 was examined using a FLAG-tagged RIP3 pull-down assay. **RESULTS**: Necrosulfonamide, an inhibitor of necrosis downstream of RIP3, did not block the necrosis-induced interaction between RIP1 and RIP3. [1]
Kinase Assay	PRMT Biochemical Assays: A scintillation proximity assay (SPA) is used for assessing the effect of test compounds on inhibiting the methyl transfer reaction catalyzed by PRMTs. In brief, the tritiated S-adenosyl-L-methionine (3H-SAM) is used as the donor of methyl group. The (3H) methylated biotin labeled peptide is captured in a streptavidin/scintillant-coated microplate, which brings the incorporated 3H-methyl and the scintillant to close proximity resulting in light emission that is quantified by tracing the radioactivity signal (counts per minute) as measured by a TopCount NXT Microplate Scintillation and Luminescence Counter. When necessary, nontritiated SAM is used to supplement the reactions. The IC50 values are determined under balanced conditions at Km concentrations of both substrate and cofactor by titration of test compounds in the reaction mixture.
Cell Research	Necrosis inhibitors induce diverse effects on MLKL phosphorylation. HT-29 cells are treated with T/S/Z with or without necrosis inhibitors for 12 hr or 8 hr. The number of dead cells is determined by measuring released protease activity in culture medium. The whole-cell extracts are prepared and analyzed by western blotting. The final concentrations of 10 μM necrostatin-1 or 1 μM necrosulfonamide are used to block necrosis. (Only for Reference)

Solubility Information

Solubility	DMSO: 45 mg/mL (97.51 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.167 mL	10.8349 mL	21.6699 mL
5 mM	0.4334 mL	2.167 mL	4.334 mL
10 mM	0.2167 mL	1.0835 mL	2.167 mL
50 mM	0.0433 mL	0.2167 mL	0.4334 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

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Bian Y, Shan G, Bi G, et al.Targeting ALDH1A1 to enhance the efficacy of KRAS-targeted therapy through ferroptosis.Redox Biology.2024: 103361.