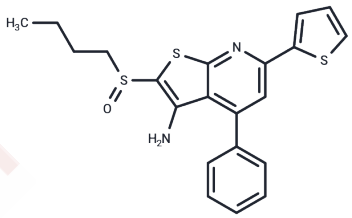
Data Sheet (Cat.No.T2121)

TargetMol

SW033291

Chemical Properties



CAS No. : 459147-39-8

Formula: C21H20N2OS3

Molecular Weight: 412.59

Storage: Store at low temperature,Keep away from direct sunlight
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	SW033291 is a small-molecule inhibitor of 15-PGDH (Ki=0.1 nM) that increases prostaglandin PGE2 levels in bone marrow and other tissues.
Targets(IC50)	Dehydrogenase
In vitro	In Vaco-503 cells, SW033291 (2.5 μM) decreases cellular 15-PGDH enzyme activity by 85%.[1]
In vivo	In mice receiving a bone marrow transplant, SW033291 (10 mg/kg, i.p.) promotes hematopoietic recovery. In mouse models of colon and liver injury, SW033291 (10 mg/kg, i.p.) reduces the levels of colitis-associated inflammatory cytokines, protects mice from colitis, and promotes liver regeneration. [1]
Kinase Assay	Fluorescence anisotropy (FP) ligand displacement assay: All components are dissolved in buffer of composition 50 mM HEPES pH 7.4, 150 mM NaCl and 0.5 mM CHAPS with final concentrations of BRD 2/3/4 75 nM, fluorescent ligand 5 nM. 10 μL of this reaction mixture is added using a micro multidrop to wells containing 100 nL of various concentrations of I-BET151 or DMSO vehicle (1% final) in Greiner 384 well Black low volume microtitre plate and equilibrated in the dark for 60 minutes at room temperature. Fluorescence anisotropy is read in Envision (lex = 485 nm, lEM = 530 nm; Dichroic = 505 nM).

Solubility Information

Solubility	DMSO: 41.3 mg/mL (100.1 mM),Sonication is recommended. Ethanol: 8.3 mg/mL (20.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% EtOH+90% Corn Oil: 0.5 mg/mL (1.21 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	2.4237 mL	12.1186 mL	24.2371 mL
5 mM	0.4847 mL	2.4237 mL	4.8474 mL
10 mM	0.2424 mL	1.2119 mL	2.4237 mL
50 mM	0.0485 mL	0.2424 mL	0.4847 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

Zhang Y, et al. Science. 2015, 348(6240), aaa2340.