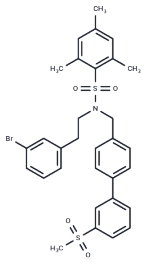
Data Sheet (Cat.No.T1801)

TargetMol

SR9243

Chemical Properties



CAS No. : 1613028-81-1

Formula: C31H32BrNO4S2

Molecular Weight: 626.62

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	SR9243, an LXR inverse agonist, can induce LXR-corepressor interaction; shows anticancer activity and selectively targets the lipogenesis and Warburg effect.
Targets(IC50)	Liver X Receptor
In vitro	In HEK293 cells expressing LXRs, SR9243 inhibits LXR activation by enhancing LXR-corepressor recruitment. In a variety of cancer cell types, SR9243 reduces cancer cell viability, induces apoptotic cell death, and sensitizes cancer cells to chemotherapeutic treatments. [1]
In vivo	In Ob/Ob mice fed a high-fat diet, SR9243 (60 mg/kg, i.p.) inhibits LXR-dependent lipogenic enzyme gene expression and tumor growth. [1]
Kinase Assay	ALK5 Fluorescence Polarization Binding Assay: GW788388 binding to ALK5 is tested on purified recombinant GST?ALK5 (residues 198-503). Displacement of rhodamine green fluorescently labeled ATP competitive inhibitor by different concentrations of GW788388 is used to calculate a binding pIC50. GST?ALK5 is added to a buffer containing 62.5 mM N-(2-hydroxyethyl)piperazine-N'-2-ethanesulfonic acid (Hepes), pH 7.5, 1 mM dithiothreitol (DTT), 12.5 mM MgCl2, 1.25 mM 3-[(3-cholamidopropyl)dimethylammonio] -1-propanesulfonic acid (CHAPS), and 1 nM rhodamine green-labeled ligand so that the final ALK5 concentration is 10 nM based on active-site titration of the enzyme. The enzyme/ligand reagent (40 µL) is added to 384-well assay plates containing 1 µL of different concentrations of GW788388. The plates are read immediately on a LJL Acquest fluorescence reader with excitation, emission, and dichroic filters of 485, 530, and 505 nm, respectively. The fluorescence polarization for each well is calculated by the Acquest and is then imported into curve-fitting software for construction of concentration?response curves.
Cell Research	Cells are cultured in 96 well plates and treated with designated amounts of SR9243 for 96 hr in media containing 1% FBS and antibiotics. Cell-viability is assessed using the Cell-titre 96 kit according to the manufacturer's guidelines. Cell culture media is supplemented with oleate, stearate and palmitate dissolved in methanol to a concentration of 25 mM. 25 mM stocks are then diluted 10 fold in PBS containing 0.9% BSA. Lipid stocks (100X) are stored at ?20° until needed.(Only for Reference)

Solubility Information

Solubility	DMSO: 20 mg/mL (31.92 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 3.13 mg/mL (5 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.13 mg/mL (5 mM),Solution. 10% DMSO+90% Corn Oil: 2 mg/mL (3.19 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	1.5959 mL	7.9793 mL	15.9586 mL
5 mM	0.3192 mL	1.5959 mL	3.1917 mL
10 mM	0.1596 mL	0.7979 mL	1.5959 mL
50 mM	0.0319 mL	0.1596 mL	0.3192 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

Flaveny CA, et al. Cancer Cell. 2015, 28(1), 42-56

Capoci I R G, Faria D R, Sakita K M, et al. Repurposing approach identifies new treatment options for invasive fungal disease. Bioorganic Chemistry. 2019 Mar;84:87-97

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