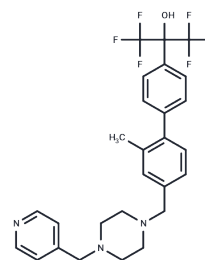


SR 1903

Chemical Properties

CAS No. : 1414248-06-8
 Formula: C₂₇H₂₇F₆N₃O
 Molecular Weight: 523.51
 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	SR 1903 is an inverse agonist of ROR γ and PPAR γ (IC ₅₀ = 100 nM and 209 nM, respectively) and an agonist of LXR (EC ₅₀ = 154 nM). It exerts anti-inflammatory and anti-diabetic effects in mouse models of collagen-induced arthritis and diet-induced obesity.
Targets(IC50)	Liver X Receptor,PPAR,ROR
In vitro	<p>Methods: Macrophages were used as the research object, pretreated with 10 μM SR 1903, and stimulated with LPS.</p> <p>Results: SR 1903 attenuated the LPS signaling pathway and inhibited TREM-1 gene expression.</p> <p>Methods: RAW264.7 macrophages were used as the model and treated with SR 1903.</p> <p>Results: SR 1903 upregulated the expression of LXR target genes, including cholesterol efflux-related genes (ABCG1, SCD) and lipid metabolism-related genes (ACACA, FASN) [1].</p>
In vivo	<p>Methods: Collagen-induced arthritis (CIA) mice were intraperitoneally injected with SR 1903 (20 mg/kg, twice daily for 16 days).</p> <p>Results: SR 1903 ameliorated arthritis symptoms and prevented thymocyte loss in mice [1].</p> <p>Methods: Diet-induced obese (DIO) mice were intraperitoneally injected with SR 1903 (20 mg/kg for 14 consecutive days).</p> <p>Results: SR 1903 improved metabolic parameters and exerted protective effects against obesity-associated thymic involution in mice [1].</p>

Solubility Information

Solubility	<p>DMSO: 10 mg/mL (19.1 mM),Sonication is recommended.</p> <p>DMF: 10 mg/mL (19.1 mM),Sonication is recommended.</p> <p>Ethanol: 5 mg/mL (9.55 mM),Sonication is recommended.</p> <p>(< 1 mg/ml refers to the product slightly soluble or insoluble)</p>
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9102 mL	9.5509 mL	19.1018 mL
5 mM	0.382 mL	1.9102 mL	3.8204 mL
10 mM	0.191 mL	0.9551 mL	1.9102 mL
50 mM	0.0382 mL	0.191 mL	0.382 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

Chang MR, et al. Unique Polypharmacology Nuclear Receptor Modulator Blocks Inflammatory Signaling Pathways. ACS Chem Biol. 2019, 14(5):1051-1062.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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