

BMS-303141

## Chemical Properties

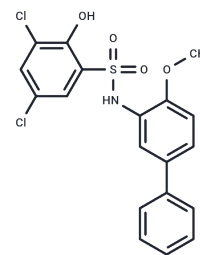
CAS No. : 943962-47-8

Formula: C<sub>19</sub>H<sub>15</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S

Molecular Weight: 424.3

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	BMS-303141 is a potent ATP-citrate lyase (ACL) inhibitor (IC <sub>50</sub> : 0.13 μM, human recombinant ACL).
Targets(IC <sub>50</sub> )	ATP Citrate Lyase
In vitro	BMS-303141 shows inhibition of total lipid syntheses with an IC <sub>50</sub> of 8 μM in HepG2 cells. BMS-303141 shows no cytotoxicity up to 50 μM under a cell-based Alamar Blue cytotoxicity assay, indicating the observed inhibition of lipid synthesis is not a result of compound-induced cytotoxicity[1].
In vivo	Chronic oral administration of BMS-303141 to mice on a high-fat diet reduces plasma cholesterol and triglycerides by approximately 20-30% and fasting plasma glucose by 30-50%. Continued treatment with BMS-303141 gradually inhibits weight gain and decreases adiposity without affecting food consumption. BMS-303141 displays an oral bioavailability of 55% and a relatively brief half-life of 2.1 hours[1].

## Solubility Information

Solubility	DMSO: 247.5 mg/mL (583.31 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.3568 mL	11.7841 mL	23.5682 mL
5 mM	0.4714 mL	2.3568 mL	4.7136 mL
10 mM	0.2357 mL	1.1784 mL	2.3568 mL
50 mM	0.0471 mL	0.2357 mL	0.4714 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

Li JJ, et al. 2-hydroxy-N-arylbenzenesulfonamides as ATP-citrate lyase inhibitors. *Bioorg Med Chem Lett*. 2007 Jun 1;17(11):3208-11.

Tang C, Wang H, Guo L, et al. CpG-Conjugated Silver Nanoparticles as a Multifunctional Nanomedicine to Promote Macrophage Efferocytosis and Repolarization for Atherosclerosis Therapy. *ACS Applied Materials & Interfaces*. 2023

Shi L, Chen H, Zhang Y, et al. SLC13A2 promotes hepatocyte metabolic remodeling and liver regeneration by enhancing de novo cholesterol biosynthesis. *The EMBO Journal*. 2025: 1-22.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481