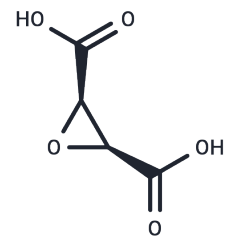


cis-Epoxysuccinic acid

Chemical Properties

CAS No. : 16533-72-5
Formula: C₄H₄O₅
Molecular Weight: 132.07
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	cis-Epoxysuccinic acid is a potential agonist of Succinate receptor 1 and inhibitor of Isocitrate lyase 1 for use in biochemical experiments.
Targets(IC50)	Others,Succinate Receptor 1 (SUCNR1)
In vitro	In vitro, cis-Epoxysuccinic acid acts as a potent agonist of the succinate receptor (SUCNR1), with enhanced efficacy across several assays (e.g., cAMP inhibition, calcium mobilization, TGF- α shedding, and β -arrestin-3 recruitment). Cis-Epoxysuccinic acid suppresses cAMP levels with an EC ₅₀ of 2.7 μ M (pEC ₅₀ = 5.57), making Cis-Epoxysuccinic acid approximately 10-20 times more potent than succinic acid[1].
In vivo	In vivo, cis-Epoxysuccinic acid significantly increases blood pressure in rats via SUCNR1 activation, demonstrating comparable potency to succinic acid[1].

Solubility Information

Solubility	DMSO: 200 mg/mL (1514.35 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.5717 mL	37.8587 mL	75.7174 mL
5 mM	1.5143 mL	7.5717 mL	15.1435 mL
10 mM	0.7572 mL	3.7859 mL	7.5717 mL
50 mM	0.1514 mL	0.7572 mL	1.5143 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

Geubelle P, et al. Identification and pharmacological characterization of succinate receptor agonists. Br J Pharmacol. 2017 May;174(9):796-808.

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