

L-2-Hydroxyglutaric acid disodium

Chemical Properties

CAS No. :	63512-50-5
Formula:	C ₅ H ₆ Na ₂ O ₅
Molecular Weight:	192.078
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	L-2-Hydroxyglutaric acid disodium ((S)-2-Hydroxyglutaric acid disodium) is an epigenetic modifier and putative oncometabolite in renal cancer. L-2-Hydroxyglutaric acid inhibits mitochondrial creatine kinase (Mi-CK) activity(K _m and K _i of 2.52 mM and 11.13 mM, respectively).
Targets(IC50)	Histone Demethylase,Mitochondrial Metabolism,Endogenous Metabolite
In vitro	L-2-hydroxyglutarate can effectively inhibit 2-oxoglutarate (2-OG) dependent dioxygenases (2OGDs), including eleven eleven translocation (TET) enzymes [2].

Solubility Information

Solubility	H ₂ O: 100.00 mg/mL (520.62 mM),Sonication is recommended. DMSO: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.2062 mL	26.0308 mL	52.0616 mL
5 mM	1.0412 mL	5.2062 mL	10.4123 mL
10 mM	0.5206 mL	2.6031 mL	5.2062 mL
50 mM	0.1041 mL	0.5206 mL	1.0412 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

da Silva CG, et al. L-2-hydroxyglutaric acid inhibits mitochondrial creatine kinase activity from cerebellum of developing rats. *Int J Dev Neurosci.* 2003 Jun;21(4):217-24.

Shim EH, et al. L-2-Hydroxyglutarate: an epigenetic modifier and putative oncometabolite in renal cancer. *Cancer Discov.* 2014 Nov;4(11):1290-8.

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