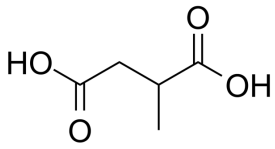
Data Sheet (Cat.No.T5231)

TargetMol

2-Methylsuccinic acid

Chemical Properties



CAS No. : 498-21-5

Formula: C5H8O4

Molecular Weight: 132.11

Storage: Keep away from moisture
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	2-Methylsuccinic acid (Pyrotartaric Acid) is a normal metabolite found in human fluids. Increased urinary levels of 2-Methylsuccinic acid (Pyrotartaric Acid) (together with ethylmalonic acid) are the main biochemical measurable features in ethylmalonic encephalopathy, a rare metabolic disorder with an autosomal recessive mode of inheritance that is clinically characterized by neuromotor delay, hyperlactic acidemia, recurrent petechiae, orthostatic acrocyanosis, and chronic diarrhea.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 55 mg/mL (416.32 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (15.14 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	7.5694 mL	37.8472 mL	75.6945 mL
5 mM	1.5139 mL	7.5694 mL	15.1389 mL
10 mM	0.7569 mL	3.7847 mL	7.5694 mL
50 mM	0.1514 mL	0.7569 mL	1.5139 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

Grosso S, et al. Ethylmalonic encephalopathy: further clinical and neuroradiological characterization. J Neurol. 2002 Oct;249(10):1446-50.