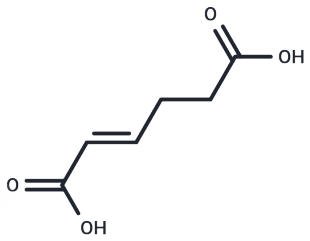
Data Sheet (Cat.No.T5246)

TargetMol

Trans-2-butene-1,4-dicarboxylic acid

Chemical Properties



CAS No. : 4436-74-2

Formula: C6H8O4

Molecular Weight: 144.13

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	Trans-2-butene-1,4-dicarboxylic acid (3-Hexenedioic Acid) is a normal human unsaturated dicarboxylic acid metabolite with increased excretion in patients with Dicarboxylic aciduria caused by fatty acid metabolism disorders The urinary excretion of Trans-2-butene-1,4-dicarboxylic acid is increased in conditions of augmented mobilization of fatty acids or inhibited fatty acid oxidation.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 55 mg/mL (381.6 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 (13.88 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	6.9382 mL	34.6909 mL	69.3818 mL
5 mM	1.3876 mL	6.9382 mL	13.8764 mL
10 mM	0.6938 mL	3.4691 mL	6.9382 mL
50 mM	0.1388 mL	0.6938 mL	1.3876 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

Jin SJ, et al. Identification of isomeric unsaturated medium-chain dicarboxylic acids in human urine. J Lipid Res. 1989 Oct;30(10):1611-9.