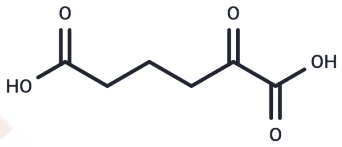
Data Sheet (Cat.No.T4921)

TargetMol

Oxoadipic acid

Chemical Properties



CAS No. : 3184-35-8

Formula: C6H8O5

Molecular Weight: 160.12

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	Oxoadipic acid (2-Oxoadipic acid) is a key metabolite of the essential amino acids tryptophan and lysine.Important metabolite between the TCA cycle and lysine biosynthesis. Of interest for research on mitochondrial metabolite transporters.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 45 mg/mL (281.04 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 (12.49 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	6.2453 mL	31.2266 mL	62.4532 mL
5 mM	1.2491 mL	6.2453 mL	12.4906 mL
10 mM	0.6245 mL	3.1227 mL	6.2453 mL
50 mM	0.1249 mL	0.6245 mL	1.2491 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

Shibata K, et al. Fluorometric determination of 2-oxoadipic acid, a common metabolite of tryptophan and lysine, by high-performance liquid chromatography with pre-chemical derivatization. Biosci Biotechnol Biochem. 2011;75 (1):185-7. Epub 2011 Jan 7.

Liu X, Zhu Y Q, Li J, et al.Electrosynthesis of adipic acid with high faradaic efficiency within a wide potential window.Nature Communications.2024, 15(1): 7685.