



D-Malic acid

Chemical Properties

CAS No.: 636-61-3
Formula: C4H6O5
Molecular Weight: 134.08
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description

D-Malic acid is a dicarboxylic acid that is made by all living organisms. Malic acid has two stereoisomeric forms (L- and D-enantiomers). The malate anion is an intermediate in the citric acid cycle.

Solubility Information

Solubility	DMSO: Soluble
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.458 mL	37.291 mL	74.582 mL
5 mM	1.492 mL	7.458 mL	14.916 mL
10 mM	0.746 mL	3.729 mL	7.458 mL
50 mM	0.149 mL	0.746 mL	1.492 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

- 1. Francis BR, Watkins K, Kubelka J. Double Hydrogen Bonding between Side Chain Carboxyl Groups in Aqueous Solutions of Poly (β-L-Malic Acid): Implication for the Evolutionary Origin of Nucleic Acids. Life (Basel). 2017 Aug 28;7(3). pii: E35. doi: 10.3390/life7030035. PubMed PMID: 29061955; PubMed Central PMCID: PMC5617960.
- 2. Varga K, Tannir S, Haynie BE, Leonard BM, Dzyuba SV, Kubelka J, Balaz M. CdSe Quantum Dots Functionalized with Chiral, Thiol-Free Carboxylic Acids: Unraveling Structural Requirements for Ligand-Induced Chirality. ACS Nano. 2017 Oct 24;11(10):9846-9853. doi: 10.1021/acsnano.7b03555. Epub 2017 Oct 2. PubMed PMID: 28956912.
- 3. Liu Y, Zhang N, Shi SP, Song QQ, Li J, Song YL, Tu PF. [Simultaneous determination of 14 organic acids in Shenfu injection by hydrophilic interaction chromatography-tandem mass spectrometry]. Zhongguo Zhong Yao Za Zhi. 2016 Sep;41(18):3342-3348. doi: 10.4268/cjcmm20161806. Chinese. PubMed PMID: 28925115.
- 4. Mishra P, Gong Z, Kelly BC. Assessing biological effects of fluoxetine in developing zebrafish embryos using gas chromatographymass spectrometry based metabolomics. Chemosphere. 2017 Dec;188:157-167. doi: 10.1016/j.chemosphere.2017.08.149. Epub 2017 Aug 31. PubMed PMID: 28881243.

Page 1 of 2 www.targetmol.com

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only \cdot Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street, Wellesley Hills, MA 02481

Page 2 of 2 www.targetmol.com