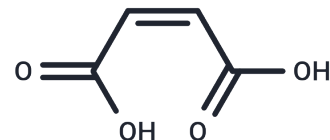


Maleic acid

Chemical Properties

CAS No. :	110-16-7
Formula:	C ₄ H ₄ O ₄
Molecular Weight:	116.07
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Maleic Acid is a Glutamate Decarboxylase (GAD) inhibitor of <i>L. monocytogenes</i> and <i>E. coli</i> .
Targets(IC50)	Endogenous Metabolite,Antibacterial
In vitro	Of all compounds tested, Maleic Acid is the least inhibitory despite acting at a lower pH (4.84). The most acid resistant (10403S) and the weakest (EGD-e) strain are challenged with 8.6 mM and 4.3 mM of each organic acid at pH 3 and 3.3 respectively. On both strains, Maleic Acid is the most bactericidal[2].

Solubility Information

Solubility	DMSO: 60 mg/mL (516.93 mM), H ₂ O: 80 mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	8.6155 mL	43.0775 mL	86.1549 mL
5 mM	1.7231 mL	8.6155 mL	17.231 mL
10 mM	0.8615 mL	4.3077 mL	8.6155 mL
50 mM	0.1723 mL	0.8615 mL	1.7231 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.

Reference

Fonda ML, et al. Glutamate decarboxylase. Substrate specificity and inhibition by carboxylic acids. *Biochemistry*. 1972 Mar 28;11(7):1304-9.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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