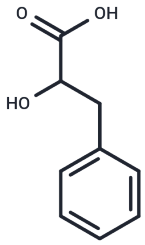
Data Sheet (Cat.No.T4455)

TargetMol

DL-3-Phenyllactic acid

Chemical Properties



CAS No. : 828-01-3

Formula: C9H10O3

Molecular Weight: 166.17

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	3-Phenyllactic acid (PhLA) is a broad spectrum antimicrobial compound active against bacteria and fungi, DL-3-Phenyllactic acid (3-Phenyllactic acid) is a reagent involved in biological studies of nantioselectivity of lipase in transesterification and oxidation by glycolate oxidase and catalase.
Targets(IC50)	Endogenous Metabolite,Antibacterial,CAT
In vitro	PhLA exists in two chiral isomers, L-PhLA and D-PhLA,which show antimicrobial activity. D-PhLA shows more antimicrobial activity than L-PhLA and hence it is receiving great attention as food and feed additive in place antibiotics which control the microbial contamination and thereby increase the shelf life of food and food ingredients.

Solubility Information

Solubility	DMSO: 250 mg/mL (1504.48 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (60.18 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (24.07 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	6.0179 mL	30.0897 mL	60.1793 mL
5 mM	1.2036 mL	6.0179 mL	12.0359 mL
10 mM	0.6018 mL	3.009 mL	6.0179 mL
50 mM	0.1204 mL	0.6018 mL	1.2036 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

Svanström Å,etal.The lactic acid bacteria metabolite phenyllactic acid inhibits both radial growth and sporulation of filamentous fungi.BMC Res Notes. 2013 Nov 14;6:464.