

Cyclo(L-Phe-L-Pro)

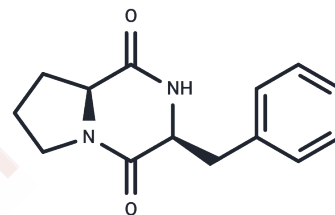
Chemical Properties

CAS No. : 3705-26-8

Formula: C₁₄H₁₆N₂O₂

Molecular Weight: 244.29

Storage: Store at low temperature, Keep away from moisture,
Keep away from direct sunlight
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	Cyclo(L-Phe-L-Pro) shows broad-spectrum antibacterial and antifungal activities. Cyclo(L-Phe-L-Pro) exhibits activity against methicillin-resistant <i>S. aureus</i> and <i>Enterococcus raffinosus</i> .
Targets(IC50)	Free radical scavengers, Reactive Oxygen Species, Antibacterial, Antifungal, COX, IFNAR, ROS
In vitro	Cyclo(L-Phe-L-Pro) interferes with the activation of retinoic-acid-inducible gene-I and inhibits the production of IFN- β [2]. Cyclo(L-Phe-L-Pro) exhibits free-radical scavenging activity with an IC ₅₀ value of 24 μ M for DPPH[3].

Solubility Information

Solubility	DMSO: 225 mg/mL (921.04 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0935 mL	20.4675 mL	40.935 mL
5 mM	0.8187 mL	4.0935 mL	8.187 mL
10 mM	0.4093 mL	2.0467 mL	4.0935 mL
50 mM	0.0819 mL	0.4093 mL	0.8187 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

- Katrin Ström, et al. Lactobacillus plantarum MiLAB 393 Produces the Antifungal Cyclic Dipeptides Cyclo(L-Phe-L-Pro) and Cyclo(L-Phe-trans-4-OH-L-Pro) and 3-Phenyllactic Acid. *Appl Environ Microbiol.* 2002 Sep;68(9):4322-7.
- Wooseong Lee, et al. Vibrio vulnificus quorum-sensing molecule cyclo(Phe-Pro) inhibits RIG-I-mediated antiviral innate immunity. *Nat Commun.* 2018 Apr 23;9(1):1606.
- Keyong Ho Lee, et al. Radioprotective effect of cyclo(L-phenylalanyl-L-prolyl) on irradiated rat lung. *J Microbiol Biotechnol.* 2008 Feb;18(2):369-76.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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