

Monolaurin

Chemical Properties

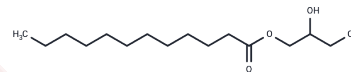
CAS No. : 142-18-7

Formula: C15H30O4

Molecular Weight: 274.4

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	Monolaurin is a surfactant and emulsifier found in coconut oil. It inhibits growth of Staphylococcus, Streptococcus, Gardnerella, Candida, and Haemophilus, and decreases production of pro-inflammatory cytokines.
Targets(IC50)	Others, Antibacterial, SARS-CoV
In vitro	Monolaurin is also active against a panel of 16 fungi when used at a concentration of 0.1% in growth media[1]

Solubility Information

Solubility	DMSO: 2.5 mg/mL (9.11 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: 1 mg/mL (3.64 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6443 mL	18.2216 mL	36.4431 mL
5 mM	0.7289 mL	3.6443 mL	7.2886 mL
10 mM	0.3644 mL	1.8222 mL	3.6443 mL
50 mM	0.0729 mL	0.3644 mL	0.7289 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

NORBERTO, LISKER, NACHMAN, et al. ANTIFUNGAL ACTIVITY OF MONOLAURIN AND RELATED COMPOUNDS[J]. Journal of Food Safety, 1982.

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