# **Product** Data Sheet

## Monolaurin

Cat. No.: HY-121620 CAS No.: 142-18-7 Molecular Formula:  $C_{15}H_{30}O_4$ Molecular Weight: 274.4

Target: Bacterial; SARS-CoV

Pathway: Anti-infection

Storage: Pure form -20°C 3 years

4°C 2 years

-80°C In solvent 6 months

> -20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 12.5 mg/mL (45.55 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	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

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.25 mg/mL (4.56 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 1.25 mg/mL (4.56 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (4.56 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Monolaurin (1-Monolaurin) possesses anti-viral and anti-bacterial activity<sup>[1][2]</sup>.

#### **CUSTOMER VALIDATION**

• Patent. US20230149309A1.

### See more customer validations on <u>www.MedChemExpress.com</u>

#### **REFERENCES**

[1]. Harry G Preuss, et al. Minimum inhibitory concentrations of herbal essential oils and monolaurin for gram-positive and gram-negative bacteria. Mol Cell Biochem. 2005 Apr;272(1-2):29-34.

[2]. Edy Subroto, et al. Bioactive monolaurin as an antimicrobial and its potential to improve the immune system and against COVID-19: a review. Food Research 4(6):2355-2365.

Caution: Product has not been fully validated for medical applications. For research use only.

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