

Product Data Sheet

m-Tolualdehyde

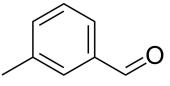
Cat. No.:HY-78086CAS No.:620-23-5Molecular Formula: C_8H_8O Molecular Weight:120.15

Target: Endogenous Metabolite; Bacterial

Pathway: Metabolic Enzyme/Protease; Anti-infection

Storage: 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (832.29 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	8.3229 mL	41.6146 mL	83.2293 mL
	5 mM	1.6646 mL	8.3229 mL	16.6459 mL
	10 mM	0.8323 mL	4.1615 mL	8.3229 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: ≥ 2.5 mg/mL (20.81 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (20.81 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (20.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	m-Tolualdehyde (3-Methylbenzaldehyde) is a compound that can be isolated from Ficus carica L. and Myosotis arvensis. m-Tolualdehyde has food protective effects. m-Tolualdehyde shows acaricidal activities for Tyrophagus putrescentiae with a LD_{50} of 1.97 $\mu g/cm^{3[1][2]}$.
IC ₅₀ & Target	Human Endogenous Metabolite

REFERENCES

[1]. Park JH, et al. Food Protective Effects of 3-Methylbenzaldehyde Derived from Myosotis arvensis and Its Analogues against Tyrophagus putrescentiae. Sci Rep. 2017 Jul 26;7(1):6608.
[2]. Raquel Rodríguez-Solana, et al. Production method and varietal source influence the volatile profiles of spirits prepared from fig fruits (Ficus carica L.). European Foc Research and Technology volume 244, pages2213–2229(2018)
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