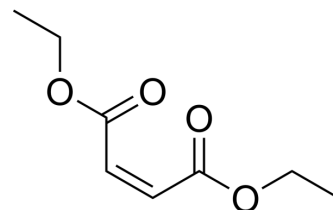


Diethyl maleate

Cat. No.:	HY-Y1147		
CAS No.:	141-05-9		
Molecular Formula:	C ₈ H ₁₂ O ₄		
Molecular Weight:	172.18		
Target:	Biochemical Assay Reagents		
Pathway:	Others		
Storage:	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : ≥ 100 mg/mL (580.79 mM)
 DMSO : 100 mg/mL (580.79 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		5.8079 mL	29.0394 mL	58.0788 mL
	5 mM		1.1616 mL	5.8079 mL	11.6158 mL
	10 mM		0.5808 mL	2.9039 mL	5.8079 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: ≥ 9.09 mg/mL (52.79 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Diethyl maleate is a maleate ester resulting from the formal condensation of both carboxy groups of maleic acid with ethanol. Diethyl maleate (DEM), a thiol-reactive α,β-unsaturated carbonyl compound, depletes glutathione (GSH) in exposed cells^[1].

REFERENCES

[1]. Andrea Gille, et al. Nuclear trapping of inactive FOXO1 by the Nrf2 activator diethyl maleate. Redox Biol. 2019 Jan;20:19-27.

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

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