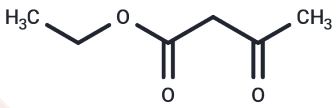
Data Sheet (Cat.No.T15254)

TargetMol

Ethyl acetoacetate

Chemical Properties



CAS No. : 141-97-9

Formula: C6H10O3

Molecular Weight: 130.14

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Ethyl acetoacetate (Ethyl acetylacetate), an ester, is a bacterial biofilm inhibitor and an intermediate utilized in the synthesis of various compounds.
Targets(IC50)	Antibacterial,Antibiotic

Solubility Information

Solubility	H2O: 90 mg/mL (691.56 mM),Sonication is recommended. DMSO: 90 mg/mL (691.56 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: 3.3 mg/mL (25.36 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.684 mL	38.4202 mL	76.8403 mL
5 mM	1.5368 mL	7.684 mL	15.3681 mL
10 mM	0.7684 mL	3.842 mL	7.684 mL
50 mM	0.1537 mL	0.7684 mL	1.5368 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

Rao MU, et al. Enantioselective catalytic asymmetric hydrogenation of ethyl acetoacetate in room temperature ionic liquids. Biochemical and Biophysical Research Communications. 1996 Dec; 229(3):764-769.
Leo F S, et al. A dual-frequency Belousov Zhabotinskii oscillating reaction with ethyl acetoacetate as organic substrate. substrate. International Journal of Chemical Kinetics. 19814(8), 815-821.
Iqbal S, et al. 2-Oxo-1,2,3,4-tetrahydropyrimidines Ethyl Esters as Potent β- Glucuronidase Inhibitors: One-pot Synthesis, In vitro and In silico Studies. Med Chem. 2018;14(8):818-830.
Horne SM, et al. Acetoacetate and ethyl acetoacetate as novel inhibitors of bacterial biofilm. Lett Appl Microbiol. 2018 Apr;66(4):329-339.

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