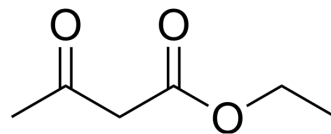


Ethyl acetoacetate

Cat. No.:	HY-Y1093		
CAS No.:	141-97-9		
Molecular Formula:	C ₆ H ₁₀ O ₃		
Molecular Weight:	130.14		
Target:	Bacterial		
Pathway:	Anti-infection		
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

DMSO : 100 mg/mL (768.40 mM; Need ultrasonic)
 H₂O : 100 mg/mL (768.40 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	7.6840 mL	38.4202 mL	76.8403 mL
	5 mM	1.5368 mL	7.6840 mL	15.3681 mL
	10 mM	0.7684 mL	3.8420 mL	7.6840 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (19.21 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (19.21 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (19.21 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ethyl acetoacetate (Ethyl acetylacetate) is an ester widely used as an intermediate in the synthesis of many varieties of compounds^{[1][2][3]}. Ethyl acetoacetate is an inhibitor of bacterial biofilm^[4].

REFERENCES

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- [1]. Rao M.Uppu, 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.
- [2]. Leo F. Salter, et al. A dual-frequency Belousov Zhabotinskii oscillating reaction with ethyl acetoacetate as organic substrate. *International Journal of Chemical Kinetics*. 1982. 14(8), 815-821.
- [3]. 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.
- [4]. 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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Caution: Product has not been fully validated for medical applications. For research use only.

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