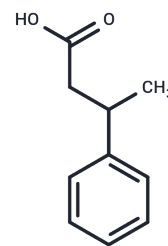


3-Phenylbutyric acid

Chemical Properties

CAS No. :	4593-90-2
Formula:	C ₁₀ H ₁₂ O ₂
Molecular Weight:	164.2
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	3-Phenylbutyric acid undergoes metabolism through initial oxidation processes involving both its benzene ring and side chain. It serves as an effective agent for the isolation of Rhodococcus rhodochrous PB1 from compost soil.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 95 mg/mL (578.56 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 (20.1 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.0901 mL	30.4507 mL	60.9013 mL
5 mM	1.218 mL	6.0901 mL	12.1803 mL
10 mM	0.609 mL	3.0451 mL	6.0901 mL
50 mM	0.1218 mL	0.609 mL	1.218 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

Simoni S, et al. Enantioselective Metabolism of Chiral 3-Phenylbutyric Acid, an Intermediate of Linear Alkylbenzene Degradation, by *Rhodococcus rhodochrous* PB1. *Appl Environ Microbiol.* 1996 Mar;62(3):749-55.

Sariaslani FS, et al. Degradation of 3-phenylbutyric acid by *Pseudomonas* sp. *J Bacteriol.* 1982 Oct;152(1):411-21.

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