

4-Methylpentanoic acid

Chemical Properties

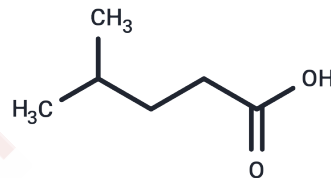
CAS No. : 646-07-1

Formula: C₆H₁₂O₂

Molecular Weight: 116.16

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	4-Methylpentanoic acid (Isocaproic Acid) is a short-chain fatty acid (SCFA) and a metabolite of 20 alpha-hydroxycholesterol.
Targets(IC50)	Others,Endogenous Metabolite

Solubility Information

Solubility	DMSO: 50 mg/mL (430.44 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: 2 mg/mL (17.22 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	8.6088 mL	43.0441 mL	86.0882 mL
5 mM	1.7218 mL	8.6088 mL	17.2176 mL
10 mM	0.8609 mL	4.3044 mL	8.6088 mL
50 mM	0.1722 mL	0.8609 mL	1.7218 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

Api AM, et al. RIFM fragrance ingredient safety assessment, 4-methylpentanoic acid, CAS Registry Number 646-07-1. Food Chem Toxicol. 2020 Oct 15;144 Suppl 1:111456.

Skonieczna-Żydecka K, et al. Faecal Short Chain Fatty Acids Profile is Changed in Polish Depressive Women. Nutrients. 2018 Dec 7;10(12).

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481