

2-Oxovaleric acid

Chemical Properties

CAS No. : 1821-02-9

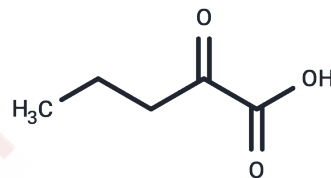
Formula: C₅H₈O₃

Molecular Weight: 116.12

Store at low temperature

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	2-Oxovaleric acid is a keto acid found in human blood.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 260 mg/mL (2239.06 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (86.12 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (28.42 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	8.6118 mL	43.0589 mL	86.1178 mL
5 mM	1.7224 mL	8.6118 mL	17.2236 mL
10 mM	0.8612 mL	4.3059 mL	8.6118 mL
50 mM	0.1722 mL	0.8612 mL	1.7224 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

- Chen, C., Yang, Y., Choo, KH. et al. Cracking the code of seasonal seawater biofouling: enhanced biofouling control with quorum sensing inhibitor-functionalized membranes. *npj Clean Water* 7, 12 (2024).
- Zhao YQ, Zhang HH, Wu J, Li L, Li J, Zhong H, Jin Y, Lei TY, Zhao XY, Xu B, Song QB, He J. Prediction of Tumor Microenvironment Characteristics and Treatment Response in Lung Squamous Cell Carcinoma by Pseudogene OR7E47P-related Immune Genes. *Curr Med Sci.* 2023 Dec;43(6):1133-1150. doi: 10.1007/s11596-023-2798-Epub 2023 Nov 28.

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