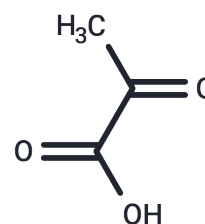


Pyruvic acid

Chemical Properties

CAS No. :	127-17-3
Formula:	C ₃ H ₄ O ₃
Molecular Weight:	88.06
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	Pyruvic acid (Acetylformic acid) is an intermediate compound in the metabolism of carbohydrates, proteins, and fats. In thiamine deficiency, its oxidation is retarded and it accumulates in the tissues, especially in nervous structures.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	Ethanol: Soluble, H ₂ O: Soluble, DMSO: 60.2 mg/mL (683.62 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: 5 mg/mL (56.78 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	11.3559 mL	56.7795 mL	113.5589 mL
5 mM	2.2712 mL	11.3559 mL	22.7118 mL
10 mM	1.1356 mL	5.6779 mL	11.3559 mL
50 mM	0.2271 mL	1.1356 mL	2.2712 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

Tsuchiya H, et al. High-performance liquid chromatography of alpha-keto acids in human saliva. Arch Oral Biol. 1983;28(11):989-92.

Gong S, Zhai M, Shi J, et al. TREM2 macrophage promotes cardiac repair in myocardial infarction by reprogramming metabolism via SLC25A53. Cell Death & Differentiation. 2024: 1-15.

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