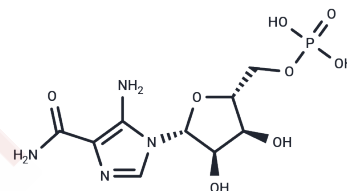


## AICAR monophosphate

## Chemical Properties

CAS No. :	3031-94-5
Formula:	C <sub>9</sub> H <sub>15</sub> N <sub>4</sub> O <sub>8</sub> P
Molecular Weight:	338.21
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	AICAR monophosphate (Aica ribonucleotide) is a purine precursor with antineoplastic activity and can be used in studies about type 2 diabetes.
Targets(IC50)	Others,Endogenous Metabolite

## Solubility Information

Solubility	DMSO: 37.5 mg/mL (110.88 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 3.75 mg/mL (11.09 mM),Solution. <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	2.9567 mL	14.7837 mL	29.5674 mL
5 mM	0.5913 mL	2.9567 mL	5.9135 mL
10 mM	0.2957 mL	1.4784 mL	2.9567 mL
50 mM	0.0591 mL	0.2957 mL	0.5913 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

Zhang M, et al. Attenuated succinate accumulation relieves neuronal injury induced by hypoxia in neonatal mice. *Cell Death Discov.* 2022 Mar 28;8(1):138.

Wang X, Xu S, Zhang L, et al. Vitamin C induces ferroptosis in anaplastic thyroid cancer cells by ferritinophagy activation. *Biochemical and Biophysical Research Communications.* 2021, 551: 46-53.

Ye H, et al. AMPK activation overcomes anti-EGFR antibody resistance induced by KRAS mutation in colorectal cancer. *Cell Commun Signal.* 2020 Jul 23;18(1):115.

Baek SY, et al. Hemistepsin A Inhibits Cell Proliferation and Induces G0/G1-Phase Arrest, Cellular Senescence and Apoptosis Via the AMPK and p53/p21 Signals in Human Hepatocellular Carcinoma. *Biomolecules.* 2020 May 4;10(5):713.

Jin K, et al. Activation of AMP-activated protein kinase during sepsis/inflammation improves survival by preserving cellular metabolic fitness. *FASEB J.* 2020 May;34(5):7036-7057.

Wang X, Xu S, Zhang L, et al. Vitamin C induces ferroptosis in anaplastic thyroid cancer cells by ferritinophagy activation[J]. *Biochemical and Biophysical Research Communications.* 2021, 551: 46-53.

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