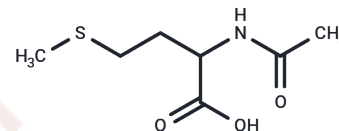


N-Acetyl-DL-methionine

Chemical Properties

CAS No. :	1115-47-5
Formula:	C7H13NO3S
Molecular Weight:	191.25
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	N-acetyl-L-methionine is nutritionally and metabolically equivalent to L-methionine. Methionine is a dietary indispensable amino acid required for normal growth and development of humans, other mammals, and avian species. In addition to being a substrate for protein synthesis, it is an intermediate in transmethylation reactions, serving as the major methyl group donor in vivo, including the methyl groups for DNA and RNA intermediates. Methionine is a methyl acceptor for 5-methyltetrahydrofolate-homocysteine methyltransferase (methionine synthase), the only reaction that allows for the recycling of this form of folate, and is also a methyl acceptor for the catabolism of betaine. Methionine is also required for the synthesis of cysteine.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 55 mg/mL (287.58 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 (10.46 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	5.2288 mL	26.1438 mL	52.2876 mL
5 mM	1.0458 mL	5.2288 mL	10.4575 mL
10 mM	0.5229 mL	2.6144 mL	5.2288 mL
50 mM	0.1046 mL	0.5229 mL	1.0458 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

Ball RO, et al. The in vivo sparing of methionine by cysteine in sulfur amino acid requirements in animal models and adult humans. J Nutr. 2006 Jun;136(6 Suppl):1682S-1693S.

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