

S-Adenosyl-L-methionine iodide

Chemical Properties

CAS No. : 3493-13-8

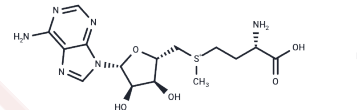
Formula: C₁₅H₂₃N₆O₅S

Molecular Weight: 526.35

Storage: Keep away from moisture, Keep away from direct sunlight

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	S-Adenosyl-L-methionine iodide is a universal methyl donor in vivo, participating in the methylation of DNA, RNA, and proteins, playing a core role in gene regulation and cellular homeostasis.
Targets(IC50)	Apoptosis, Endogenous Metabolite
In vitro	S-Adenosyl-L-methionine iodide (300 μM) induces apoptosis and cell cycle arrest in oral squamous cell carcinoma cells by downregulating cyclins B1, E1, and D1 [4]. It also enhances the sensitivity of cancer cells to 5-FU by modulating the expression of DNA methyltransferases (DNMTs) [5].
In vivo	Oral administration of S-Adenosyl-L-methionine iodide (30 mg/kg) prevents ASD-like neurobehavioral symptoms and normalizes redox potential in mouse models [6]. It also demonstrates anti-epileptic and memory-enhancing properties by reducing oxidative stress in seizure-induced rat models [7].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8999 mL	9.4994 mL	18.9988 mL
5 mM	0.380 mL	1.8999 mL	3.7998 mL
10 mM	0.190 mL	0.9499 mL	1.8999 mL
50 mM	0.038 mL	0.190 mL	0.380 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

- W Wang, et al. Reversed-phase high-performance liquid chromatography procedure for the simultaneous determination of S-adenosyl-L-methionine and S-adenosyl-L-homocysteine in mouse liver and the effect of methionine on their concentrations.
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- Mosca L, et al. Effects of S-adenosyl-L-methionine on the invasion and migration of head and neck squamous cancer cells and analysis of the underlying mechanisms. Int J Oncol. 2020 May;56(5):1212-1224.
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- Dhediya RM, et al. Evaluation of antiepileptic effect of S-adenosyl methionine and its role in memory impairment in pentylenetetrazole-induced kindling model in rats. Epilepsy Behav. 2016 Aug;61:153-157.

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