Data Sheet (Cat.No.T5912)

TargetMol

5-Methylcytidine

Chemical Properties

CAS No. : 2140-61-6

Formula: C10H15N3O5

Molecular Weight: 257.243

Storage: Store at low temperature
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	5-Methylcytidine is a modified nucleoside derived from 5-methylcytosine and is a minor constituent of RNA as well as DNA for certain organisms.
Targets(IC50)	Nucleoside Antimetabolite/Analog,Endogenous Metabolite,HSV

Solubility Information

Solubility	DMSO: 250.00 mg/mL (971.84 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10.00 mg/mL (38.87 mM),Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2.00 mg/mL (7.77 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8874 mL	19.4371 mL	38.8742 mL
5 mM	0.7775 mL	3.8874 mL	7.7748 mL
10 mM	0.3887 mL	1.9437 mL	3.8874 mL
50 mM	0.0777 mL	0.3887 mL	0.7775 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

Transcriptome-wide mapping of 5-methylcytidine RNA modifications in bacteria, archaea, and yeast reveals m5C within archaeal mRNAs.

Li H, Yu K, Hu H, et al.METTL17 coordinates ferroptosis and tumorigenesis by regulating mitochondrial translation in colorectal cancer.Redox Biology.2024: 103087.

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