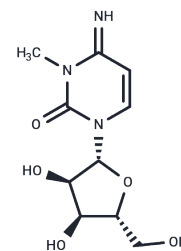


3-Methylcytidine

Chemical Properties

| | |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAS No. : | 2140-64-9 |
| Formula: | C10H15N3O5 |
| Molecular Weight: | 257.24 |
| Storage: | Store at low temperature, Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i> |



Biological Description

| | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------|
| Description | 3-Methylcytidine as biomarkers of four different types of cancer: lung cancer, gastric cancer, colon cancer, and breast cancer. |
| Targets(IC50) | Nucleoside Antimetabolite/Analog |

Solubility Information

| | |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solubility | DMSO: 83.33 mg/mL (323.94 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: 3.3 mg/mL (12.83 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 | 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

Hsu W Y , Chen C J , Huang Y C , et al. Urinary Nucleosides as Biomarkers of Breast, Colon, Lung, and Gastric Cancer in Taiwanese[J]. PLoS ONE, 2013, 8(12):e81701.

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

Xu L , Liu X , Sheng N , et al. Three distinct 3-methylcytidine (m3C) methyltransferases modify tRNA and mRNA in mice and humans[J]. Journal of Biological Chemistry, 2017:jbc.M117.798298.

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