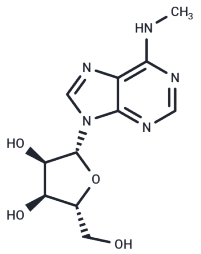
Data Sheet (Cat.No.T6599)

TargetMol

N6-methyladenosine

Chemical Properties



CAS No. : 1867-73-8

Formula: C11H15N5O4

Molecular Weight: 281.27

Storage: Keep away from direct sunlight,Keep away from moisture
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	N6-Methyladenosine is a methylated adenine residue, glycoside is an endogenous uridine product of transfer RNA degradation. It is the most prevalent internal modification of messenger RNA present in all higher eukaryotes and can modify viral RNA with antiviral activity.
Targets(IC50)	Endogenous Metabolite,Influenza Virus
In vitro	N6-Methyladenosine is an abundant modification in mRNA and is found within some viruses, and most eukaryotes including mammals, insects, plants and yeast. It is also found in tRNA, rRNA, and small nuclear RNA(snRNA) as well as several long non-coding RNA, such as Xist. [1] [2] [3] N6-Methyladenosine is an endogenous urinary nucleoside product of the degradation of transfer ribonucleic acid (tRNA). [4] N6-Methyladenosine is a widespread RNA modification in many tissues with high levels in the brain. N6-Methyladenosine is enriched near stop codons and within 3'UTRs in both mouse and human mRNAs. [5] The recent discovery that FTO, an obesity risk gene, encodes an m6A demethylase implicates m6A as an important regulator of physiological processes. [6]
In vivo	LD50: Mice >1 g/kg (i.g.). [7]
Kinase Assay	NOD1 Dose Response assay: Day 1 Procedure 1) Harvest HEK-293-T NFKB-Luc at 100% confluency at 100% confluency. 2) Add NOD assay media with Multidrop. 3) Spin down plates at 1000 rpm for 1 min in centrifuge. 4) Serial compound dilutions. 5) Add gamma-tri-DAP to cell suspension at 0.75 ug/mL. 6) Seed 13000 cells/well in 4 uL/well to full plate HEK-293-T NFKB-Luc to TC-treated plate. 7) Spin down plates 500 RPM for 5 min on centrifuge. 8) Lid Plates. Sandwich 4 plates between 2 lidded 384 plates filled with Water. 9) Wrap plates securely in single layer of Plastic Wrap. 10) Incubate overnight (14 hours) in 37 ℃ and 5% CO2 incubator. Day 2 Procedure 1) Add 3 ul/well of SteadyGlo solution with Multidrop. 2) Shake plates on a plate shaker for 20 min. 3) Spin plates 1000 RPM for 1 min using centrifuge. 4) Read luminescence.IC50 values are calculated using GraphPad Prism 5.0.The average Z' for the screen is 0.6, the signal to background is 11.1, signal to noise is 78.6 and signal to window is 6.0.

Solubility Information

Solubility	Ethanol: 2 mg/mL (7.11 mM),Sonication is recommended. DMSO: 126 mg/mL (447.97 mM),Sonication is recommended. H2O: 14 mg/mL (49.77 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: 4 mg/mL (14.22 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	3.5553 mL	17.7765 mL	35.553 mL
5 mM	0.7111 mL	3.5553 mL	7.1106 mL
10 mM	0.3555 mL	1.7777 mL	3.5553 mL
50 mM	0.0711 mL	0.3555 mL	0.7111 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

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