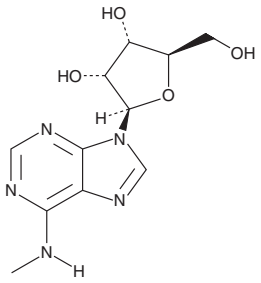
PRODUCT INFORMATION

N^6-Methyladenosine

Item No. 28833

CAS Registry No.:	1867-73-8
Formal Name:	N-methyl-adenosine
Synonym:	NSC 29409
MF:	$C_{11}H_{15}N_5O_4$
FW:	281.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 266 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

N^6-Methyladenosine is an adenosine analog.[1] It inhibits epinephrine-induced contraction of isolated guinea pig ileum and thoracic aorta when used at a concentration of 10 µM. N^6-Methyladenosine (1 mg/kg, i.v.) decreases arterial blood pressure and renal blood flow and increases peripheral resistance in anesthetized dogs.[2] It also inhibits tumor growth in the C3H/ST and C3HB/ST mouse models of spontaneous mammary adenocarcinomas.[3] N^6-Methyladenosine is also the most prevelant mRNA modification in eukaryotes and has roles in cell viability and development.[4]

References

1. Leslie, S.W., Borowitz, J.L., and Miya, T.S. Adenosine analogs: Structure-activity relationships in vascular and intestinal smooth muscle. *J. Pharm. Sci.* **62(9)**, 1449-1452 (1973).
2. Bhanalaph, T., Mittelman, A., Ambrus, J.L., *et al.* Effect of adenosine and some of its analogs on renal hemodyamics. *J. Med.* **4(3)**, 178-188 (1973).
3. Strong, L.C. and Matsunaga, H. Comparison of the effect of three nucleosides and a liver emulsion upon the inhibition of cancer in mice. *J. Surg. Oncol.* **4(3)**, 248-254 (1972).
4. Wang, X., Lu, Z., Gomez, A., *et al.* N^6-Methyladenosine-dependent regulation of messenger RNA stability. *Nature* **505(7481)**, 117-120 (2014).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM