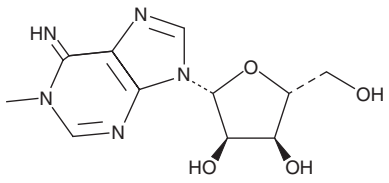
PRODUCT INFORMATION

1-Methyladenosine

Item No. 16937

CAS Registry No.: 15763-06-1
Formal Name: 1-methyl-adenosine
Synonyms: m^1A, 1-methyl Ado, NSC 92165
MF: $C_{11}H_{15}N_5O_4$
FW: 281.3
Purity: ≥98%
UV/Vis.: λ_{max}: 259 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.

Laboratory Procedures

1-Methyladenosine is supplied as a crystalline solid. A stock solution may be made by dissolving the 1-methyladenosine in the solvent of choice, which should be purged with an inert gas. 1-Methyladenosine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 1-methyladenosine in these solvents is approximately 20 and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 1-methyladenosine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 1-methyladenosine in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

1-Methyladenosine is a modified nucleoside generated by the processing of tRNA by methyltransferases.[1-3] Urine and serum levels of 1-methyladenosine are elevated in several forms of cancer.[4-7] Urine levels of 1-methyladenosine also increase during active rheumatoid arthritis.[8]

References

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5. Seidel, A., Brunner, S., Seidel, P., *et al. Br. J. Cancer* **94(11)**, 1726-1733 (2006).
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8. Tebib, J.G., Reynaud, C., Cedoz, J.P., *et al. Br. J. Rheumatol.* **36(9)**, 990-995 (1997).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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