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Product Information

Cordycepin

Product Number **C 3394**
Storage Temperature -0 °C

Product Description

Molecular Formula: $C_{10}H_{13}N_5O_3$

Molecular Weight: 251.2

CAS Number: 73-03-0

Melting Point: 225-226 °C

λ_{max} : 260 nm

Extinction Coefficient: $E^{mM} = 14.6$ (ethanol)¹

Cordycepin is an adenosine analog which was originally isolated from cultures of *Cordycepin militaris*, and was the first reported nucleoside antibiotic.² Cordycepin inhibits the poly-adenylation of Hn-RNA in HeLa cells at a concentration of 50 µg/ml. It also inhibits 45S rRNA synthesis in eukaryote cells. The inhibitory action of cordycepin is reversed by adenosine, but not by 2'-deoxyadenosine.¹ Cordycepin and Cordycepin triphosphate have been used extensively in the study of messenger RNA transcription.^{3,4}

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in water (1 mg/ml). The solubility is routinely tested at 20 mg/ml (1 M NH_4OH), forming a clear, colorless solution.

References

1. Data for Biochemical Research, 3rd ed., Dawson, R. M. C., et al., Oxford University Press (New York, NY: 1986), p. 265.
2. The Merck Index, 12th ed, Entry# 2593.
3. Biochem. Biophys. Res. Commun., **17**, 758 (1964).
4. Penman, S., et al., Messenger and heterogeneous nuclear RNA in HeLa cells: differential inhibition by cordycepin. Proc. Natl. Acad. Sci. U S A, **67**(4), 1878-1885 (1970).

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