

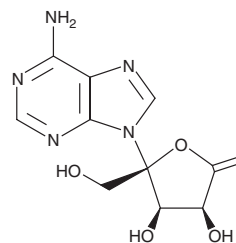
PRODUCT INFORMATION



Decoyinine

Item No. 13851

CAS Registry No.: 2004-04-8
Formal Name: 4',5'-didehydro-1'-C-(hydroxymethyl)-adenosine
Synonym: Angustmycin A
MF: $C_{11}H_{13}N_5O_4$
FW: 279.3
Purity: $\geq 98\%$
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

Decoyinine is supplied as a crystalline solid. A stock solution may be made by dissolving the decoyinine in the solvent of choice, which should be purged with an inert gas. Decoyinine is soluble in the organic solvent DMSO.

Description

Decoyinine is a nucleoside analog and a reversible and non-competitive inhibitor of GMP synthase ($IC_{50} = 17.3 \mu\text{M}$).¹ It reduces intracellular levels of GMP, GDP, and GTP, induces sporulation, and inhibits growth and cell wall synthesis in *B. subtilis*.²⁻⁴ It also reverses inhibition of aerial mycelium formation in *Streptomyces* grown in the presence of excess nutrients.⁵

References

1. Nakamura, J. and Lou, L. Biochemical characterization of human GMP synthetase. *J. Biol. Chem.* **270**(13), 7347-7353 (1995).
2. Uratani, B., Lopez, J.M., and Freese, E. Effect of decoyinine on peptidoglycan synthesis and turnover in *Bacillus subtilis*. *J. Bacteriol.* **154**(1), 261-268 (1983).
3. Zain-ul-abedin, Lopez, J.M., and Freese, E. Induction of bacterial differentiation by adenine- and adenosine-analogs and inhibitors of nucleic acid synthesis. *Nucleos. Nucleot.* **2**(3), 257-274 (1983).
4. Bai, U., Lewandoski, M., Dubnau, E., et al. Temporal regulation of the *Bacillus subtilis* early sporulation gene spo0F. *J. Bacteriol.* **172**(9), 5432-5439 (1990).
5. Ochi, K. A decrease in GTP content is associated with aerial mycelium formation in *Streptomyces* MA406-A-1. *J. Gen. Microbiol.* **132**(2), 299-305 (1986).

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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