

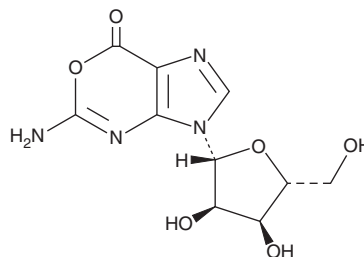
PRODUCT INFORMATION



Oxanosine

Item No. 33503

CAS Registry No.: 80394-72-5
Formal Name: 5-amino-3-β-D-ribofuranosyl-imidazo[4,5-d][1,3]oxazin-7(3H)-one
Synonym: NSC 359452
MF: C₁₀H₁₂N₄O₆
FW: 284.2
Purity: ≥90%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces capreolus* MG265-CF3



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

Laboratory Procedures

Oxanosine is supplied as a solid. A stock solution may be made by dissolving the oxanosine in the solvent of choice, which should be purged with an inert gas. Oxanosine is soluble in methanol and DMSO. Oxanosine is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Oxanosine is an analog of guanosine (Item No. 27702) that has been found in *S. capreolus* and has diverse biological activities, including antibacterial, antiviral, and anticancer properties.^{1,2} It is active against a variety of bacteria, including *S. flexneri*, *P. mirabilis*, and *E. coli* (MICs = 6.25, 12.5, 25 µg/ml, respectively, on peptone, but not nutrient, agar). Oxanosine inhibits replication of the HIV-1 strain IIIb in infected CEM and U937, but not H9, cells (EC₅₀s = 7, 27, and >500 µg/ml, respectively).¹ It also inhibits the growth of HeLa human cervical cancer cells (IC₅₀ = 32 µg/ml) and reduces tumor growth in a murine L1210 lymphocytic leukemia model.²

References

1. Saito, Y., Nakamura, M., Ohno, T., *et al.* Syntheses of oxanosine and carbocyclic oxanosine derivatives as anti-HIV agents. *J. Antibiot. (Tokyo)* **53**(3), 309-313 (2000).
2. Shimada, N., Yagisawa, N., Naganawa, H., *et al.* Oxanosine, a novel nucleoside from actinomycetes. *J. Antibiot. (Tokyo)* **34**(9), 1216-1218 (1981).

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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