

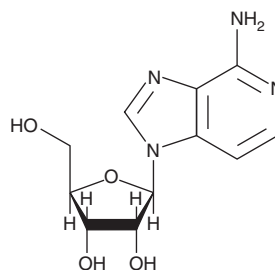
PRODUCT INFORMATION



3-Deazaadenosine

Item No. 9000785

CAS Registry No.: 6736-58-9
Formal Name: 1-β-D-ribofuranosyl-1H-imidazo[4,5-c]pyridin-4-amine
Synonyms: c3Ado, deaza-Ado, 3-DZA
MF: C₁₁H₁₄N₄O₄
FW: 266.3
Purity: ≥98%
UV/Vis.: λ_{max}: 267 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

3-Deazaadenosine (3-DZA) is supplied as a crystalline solid. A stock solution may be made by dissolving the 3-DZA in the solvent of choice, which should be purged with an inert gas. 3-DZA is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 3-DZA 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 3-DZA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3-DZA in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3-DZA is an inhibitor of SAH hydrolase ($K_i = 3.9 \mu\text{M}$).^{1,2} It has anti-inflammatory properties, inhibiting leukocyte adhesion and chemotaxis, lymphocyte-mediated cytolysis, phagocytosis, degranulation, and NF-κB signaling.^{3,4} 3-DZA also has antiviral and antibacterial activities.^{1,5,6}

References

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3. Jurgensen, C.H., Huber, B.E., Zimmerman, T.P., et al. *J. Immunol.* **144**(2), 653-61 (1990).
4. Jeong, S.-Y., Ahn, S.-G., Lee, J.-H., et al. *J. Biol. Chem.* **274**(27), 18981-8 (1999).
5. Long, M.C., Allan, P.W., Luo, M.-Z., et al. *J. Antimicrob. Chemother.* **59**, 118-21 (2007).
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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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