

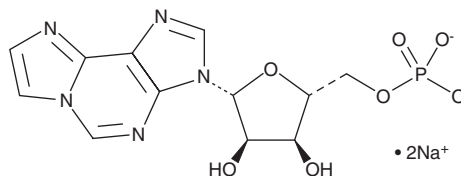
PRODUCT INFORMATION



1,N⁶-Ethenoadenosine 5'-monophosphate (sodium salt)

Item No. 21227

CAS Registry No.: 885597-18-2
Formal Name: 3-(5-O-phosphono-β-D-ribofuranosyl)-3H-imidazo[2,1-i]purine, disodium salt
Synonyms: 1,N⁶-ε-AMP, 1,N⁶-Etheno-AMP
MF: C₁₂H₁₂N₅O₇P • 2Na
FW: 415.2
Purity: ≥97%
UV/Vis.: λ_{max}: 275 nm
Ex./Em. Max: 250-300/415 nm
Supplied as: A lyophilized 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,N⁶-Ethenoadenosine 5'-monophosphate (1,N⁶-ε-AMP) is supplied as a lyophilized solid. A stock solution may be made by dissolving the 1,N⁶-ε-AMP in the solvent of choice. 1,N⁶-ε-AMP is partly miscible in water.

Description

1,N⁶-ε-AMP is a highly fluorescent analog of adenosine 5'-monophosphate (AMP; Item No. 21094).^{1,2} 1,N⁶-ε-AMP is characterized by a long fluorescent lifetime, detectability at low concentration, a relatively long wavelength of excitation (250-300 nm), and emission at 415 nm.²⁻⁴ 1,N⁶-ε-AMP can be used in assays of 5'-nucleotidase activity.^{5,6}

References

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3. Penzer, G.R. The solution conformation and some spectroscopic properties of 1,N⁶-ethenoadenosine monophosphate, a fluorescent analogue of AMP. *Eur. J. Biochem.* **34(2)**, 297-305 (1973).
4. Spencer, R.D., Weber, G., Tolman, G.L., *et al.* Species responsible for the fluorescence of 1:N⁶-ethenoadenosine. *Eur. J. Biochem.* **45(2)**, 425-429 (1974).
5. Jamaz, Z., Afkham-Ebrahimi, A., and Saggerson, E.D. A novel assay for 5'-nucleotidase using 1,N⁶-etheno-AMP as substrate, and comments on the properties of the reaction product, ethenoadenosine. *Biochem J.* **250(2)**, 369-373 (1988).
6. Pexa, A., and Deussen, A. Modulation of ecto-5'-nucleotidase by phospholipids in human umbilical vein endothelial cells (HUVEC). *Naunyn-Schmiedeberg's Arch. Pharmacol.* **372(2)**, 131-138 (2005).

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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