

PRODUCT INFORMATION

2'-Deoxy-1,N⁶-ethenoadenosine-5'-O-triphosphate (sodium salt)

Item No. 38666

Formal Name: 3-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-β-D-erythro-pentofuranosyl]-3H-imidazo[2,1-i]purine, tetrasodium salt

Synonym: ε-dATP

MF: C₁₂H₁₂N₅O₁₂P₃ • 4Na

FW: 603.1

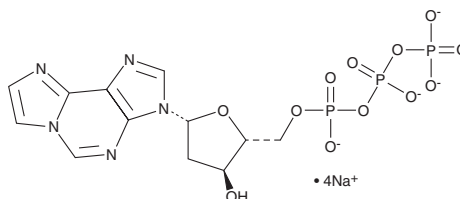
Purity: ≥95%

Ex./Em. Max: 310/400 nm

Supplied as: A solution in water

Storage: -80°C

Stability: ≥4 years



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

Description

2'-Deoxy-1,N⁶-ethenoadenosine-5'-O-triphosphate (ε-dATP) is a fluorescent derivative of the purine nucleotide 2'-deoxyadenosine-5'-O-triphosphate (dATP; Item No. 32566).¹ It induces sister chromatid exchange in primary mouse spleen T- and B lymphocytes stimulated with LPS or concanavalin A (Item No. 14951) when used at concentrations ranging from 50 to 150 μM. ε-dATP has been used in the study of ambiguous base pairing in vinyl chloride-induced mutagenesis.² A related ATP derivative, ε-ATP, displays an emission maxima of 415 nm upon excitation at 300 nm.³

References

1. Conner, M.K., Modzelewski, R.A., and Kawatani, N. Sister chromatid exchange induced by etheno-ATP derivatives *in vitro*. *Cancer Res.* **49(14)**, 3839-3843 (1989).
2. Revich, G.G. and Beattie, K.L. Utilization of 1,N⁶-etheno-2'-deoxyadenosine 5'-triphosphate during DNA synthesis on natural templates, catalyzed by DNA polymerase I of *Escherichia coli*. *Carcinogenesis* **7(9)**, 1569-1576 (1986).
3. Secrist, J.A., III, Barrio, J.R., Leonard, N.J., *et al.* Fluorescent modification of adenosine-containing coenzymes. Biological activities and spectroscopic properties. *Biochemistry* **11(19)**, 3499-3506 (1972).

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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