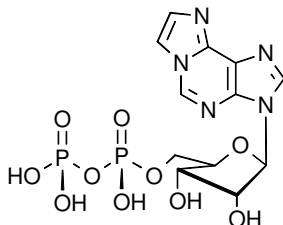


Technical Information about 1, N⁶- Etheno- ADP

Fluorescent analogue of adenosine- 5'- O- diphosphate

Update: October 04, 2007 TR



Abbreviation: ϵ -ADP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₂ H ₁₅ N ₅ O ₁₀ P ₂ for free acid form	[103213-52-1]	451.2	λ_{\max} 275 nm / ϵ 6000 / pH7	E 007

Name: 1, N⁶- Ethenoadenosine- 5'- O- diphosphate (ϵ -ADP)

Description: ϵ -ADP is an analog of the parent structure adenosine-5'-O-diphosphate in which both the N¹ and the N⁶ nitrogen atoms in the adenine nucleobase are connected by an etheno bridge forming a tricyclic ring system.

Properties: ϵ -ADP is a fluorescent analog of ADP with λ_{exc} 300 nm and λ_{em} 415 nm.

Specification: Aqueous solution of the sodium salt (10 mM). Other salt forms of ϵ -ADP are available upon request. Micromolar quantities are determined by UV at 275 nm.

Purity: Typical analysis is better than 97% (HPLC /UV/275 nm). The product is not sterile.

Stability and Storage: ϵ -ADP is relatively stable when stored as aqueous solution in the freezer (- 20° celsius necessary, - 80° recommended).

Toxicity and Safety: Since adenosine diphosphate has multiple tasks in every organism it is likely that ADP analogs could interfere with many cell regulation processes in vivo. However, due to the rather small quantities to work with no health hazards have been reported. Nevertheless please keep in mind that the in vivo properties of this compounds are not sufficiently characterized up to now. Avoid skin contact or ingestion and allow only trained personnel to handle the product. Our products are designed, developed and sold for research purposes only. They are intended for *in vitro* and nonhuman *in vivo* laboratory applications. Any other use requires approval of health authorities.

Not for drug, household or related uses!

References for ϵ -Nucleotides :

- 1 Secrist et al., *Biochemistry* **11**, 3499 - 3506 (1972)
- 2 Yip et al., *Tetrahedron Lett.*, **33**, 3087 - 3090 (1973)
- 3 Gräber, P., *Biochem. Biophys. Res. Comm.*, **96**, 1232 - 1239 (1980)