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# Technical Information about $N^6$-(2-Phenylethyl)-ADP

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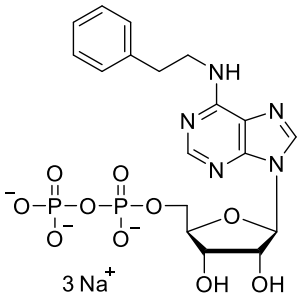


**Abbreviation:** **6-PhEt-ADP**

| Formula | CAS No. | Molecular Weight | UV | BIOLOG Cat. No. |
|---|---|---|---|---|
| $C_{18}H_{23}N_5O_{10}P_2$ for free acid | [681175-76-8] | 531.4 for free acid | $\lambda_{max}$ 269 nm / ε 20500 / pH 7 | P 013 |

**Name:** $N^6$- (2- Phenylethyl)adenosine- 5'- O- diphosphate, sodium salt

**Description:** 6-PhEt-ADP is an analogue of adenosine- 5'- O- diphosphate (ADP) in which one hydrogen of the 6- amino group has been substituted by a phenylethyl moiety.

**Properties:**

- Precursor of the corresponding radio-labelled triphosphate which can be used for identification of the specific substrates of an engineered protein kinase as described by Shah et al. (1997),
- selective inhibitor of the ATP hydrolytic activity of an engineered myosin-Iβ mutant (Gillespie et al. 1999),
- selective inhibitor of an engineered myosin Vb mutant (Provance et al. 2004).

**Specification:** Sodium salt in aqueous solution (10 mM). Other salt forms of 6-PhEt-ADP are available upon request. Micromolar quantities are determined by UV at $\lambda_{max}$. When opening the tube please make sure that no liquid is lost within the cap. A short spin-down in a bench centrifuge is recommended before use.

**Purity:** Typical purity is better than 95% (HPLC / UV / 269 nm) at time of quality control and packing. The product is not sterile and has not been tested for endotoxins.

**Stability and Storage:** 6-PhEt-ADP is relatively stable when stored frozen in aqueous solution (- 20° celsius necessary, - 80° recommended). In order to maintain its original high quality, and especially if you want to avoid any decomposition, it is recommended to allow thawing only before using the product. If you will not use up the vial with one application, please aliquot the contents of the vial in order to avoid repeated freeze/thawing cycles for the rest. When making such aliquots be sure to operate quickly and to freeze the vial again as soon as possible.

**Toxicity and Safety:** Since nucleoside diphosphates have multiple tasks in every organism, it is very likely that ADP analogues will 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 compound 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!**

**Selected References for 6-PhEt-ADP:**


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