

Technical Information about N⁶-(2-Phenylethyl)-ATP

Update: May 4, 2022 is



Abbreviation:

6-PhEt-ATP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₈ H ₂₄ N ₅ O ₁₃ P ₃ for free adic	[181705-62-4]	611.3 for free acid	λ_{max} 269 nm / ϵ 20500 / pH 7	P 012

Name: N6- (2- Phenylethyl)adenosine- 5'- O- triphosphate, sodium salt

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

Properties:

- ATP analogue useful for specifc interaction with modified receptor proteins
- Selective inhibitor of ATP hydrolysis by an engineered myosin-Iβ mutant (Gillespie et al. 1999)
- Suitable for studying cystic fibrosis transmembrane conductance regulator (CFTR) gating (Zhou et al. 2005)

Specification: Sodium salt in aqueous solution (10 mM). Other salt forms of 6-PhEt-ATP are available upon request. Micromolar quantities are determined by UV at λ_{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-ATP 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/thaw 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 triphosphates have multiple tasks in every organism, it is very likely that ATP 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!



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