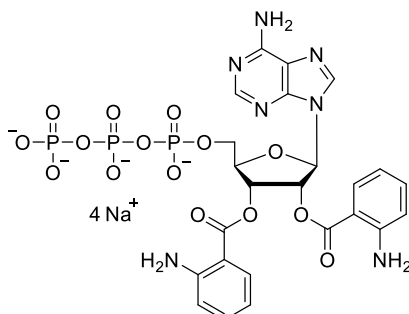


## Technical Information about Bis-ANT-ATP

### Fluorescent Analogue of ATP

Update: November 01, 2018 HU



#### Abbreviation: Bis-ANT-ATP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>24</sub> H <sub>26</sub> N <sub>7</sub> O <sub>15</sub> P <sub>3</sub> (for free acid)	[pending]	745.4 (for free acid)	λ <sub>max</sub> 250 nm / ε 20200 / pH 7	B 090

**Name:** 2', 3'- O- (Bis- anthraniloyl)adenosine- 5'- O- triphosphate

**Description:** Bis-ANT-ATP is an analogue of adenosine-5'-O-triphosphate (ATP) in which both the ribose 2'-hydroxy group and the 3'- hydroxy group have been modified with anthraniloyl groups.

**Properties:** Bis-ANT-ATP is an analogue of ATP with only moderate intrinsic fluorescence (λ<sub>exc</sub> 337 nm; λ<sub>em</sub> 423 nm) which increases considerably within hydrophobic environment. Bis-ANT-ATP can be useful for research into ATP-dependent receptor proteins.

**Specification:** Aqueous solution of the sodium salt (10 mM). Other salt forms of Bis-ANT-ATP are available upon request. Micromolar quantities are determined by UV at λ<sub>max</sub>. 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 / 250 nm) at time of quality control and packing. However, actual purity depends on storage and transport conditions. The product is not sterile and has not been tested for endotoxins.

**Stability and Storage:** Bis-ANT-ATP is most stable when stored as aqueous solution in the freezer (- 20° Celsius necessary, - 80° recommended), however, at ambient temperature the compound slowly starts to decompose. Thus, in order to maintain its original high quality 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. The compound should be protected from light.

**Toxicity and Safety:** Since 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!**

#### References for Related Compounds:

Taha, H.; Dove, S.; Geduhn, J.; König, B.; Shen, Y.; Tang, W.J.; Seifert, R., *Naunyn Schmiedebergs Arch. Pharmacol.*, **385**, 57 - 68 (2012): "Inhibition of the Adenylyl Cyclase Toxin, Edema Factor, from Bacillus Anthracis by a Series of 18 Mono- and Bis-(M)ANT-Substituted Nucleoside 5'-Triphosphates"

Hiratsuka, T., *Biochim. Biophys. Acta*, **742**, 496 - 508 (1983): "New Ribose-modified Fluorescent Analogs of Adenine and Guanine Nucleotides Available as Substrates for Various Enzymes"