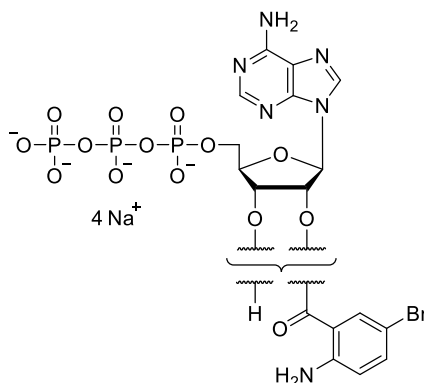


Technical Information about Br-ANT-ATP

Update: October 19, 2023 ss



Abbreviation:

Br-ANT-ATP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₇ H ₂₀ BrN ₆ O ₁₄ P ₃ (free acid)	[1350521-49-1]	705.2 (free acid)	λ _{max} 256 nm / ε 16400 / pH 7	B 110

Name: 2'- / 3'- O- (5- Bromoanthraniloyl)adenosine- 5'- O- triphosphate, sodium salt

Description: Br-ANT-ATP is an analogue of adenosine-5'-triphosphate (ATP), where either the ribose 2' or the 3' hydroxyl group has been modified with a fluorescent bromoanthraniloyl group (λ_{exc} 350 nm, λ_{em} ~450 nm).

Properties: The ANT fluorophore is supposed to have a certain sensitivity for its environment and can change its spectral properties upon binding. The intrinsic fluorescence of the bromoanthraniloyl group is only moderate. Br-ANT-ATP is useful for research into ATP-dependent receptor proteins.

Specification: Aqueous solution of the sodium salt (10 mM). Other salt forms of Br-ANT-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 / 256 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: Br-ANT-ATP is most stable when stored as aqueous solution in the freezer (-20° Celsius necessary, -70° 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. Exposure to bright light should be avoided.

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!

Selected References for Br-ANT-ATP:

Seifert R.; Dove S., *Pharmacol. Therapeut.*, **140**, 200 - 212 (2013): "Inhibitors of Bacillus anthracis Edema Factor"

Geduhn, J.; Dove, S.; Shen, Y.; Tang, W. J.; König, B.; Seifert, R., *J. Pharmacol. Exp. Ther.*, **336**, 104 - 115 (2011): "Bis-halogen-anthraniloyl-Substituted Nucleoside 5'-Triphosphates as Potent and Selective Inhibitors of *Bordetella pertussis* Adenylyl Cyclase Toxin"