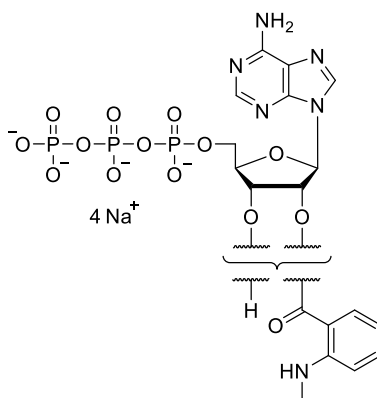


Technical Information about 2'- / 3'- O- (N'- Methylanthraniloyl)- ATP (MANT-ATP)

Fluorescent analogue of adenosine- 5'- O- triphosphate

Update: January 23, 2020 HU



Abbreviation:

MANT-ATP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₈ H ₂₃ N ₆ O ₁₄ P ₃	[151481-86-6]	640.3 (free acid)	λ _{max} 255 nm / ε 23300 / pH 8 ¹⁾ λ _{max} 356 nm / ε 5800 / pH 8 ¹⁾	M 030

Name: 2'- / 3'- O- (N'- Methylanthraniloyl)adenosine- 5'- O- triphosphate

Description: MANT-ATP is an analogue of the natural structure ATP where either the ribose 2' hydroxy or the 3' hydroxy group have been esterified by the fluorescent methylisatoic acid.

Properties: MANT-ATP is a fluorescent analogue of ATP with λ_{exc} 350 nm and λ_{em} 446 nm, useful for research into ATP-dependent receptor proteins. The MANT fluorophore has a certain sensitivity for its environment and can change its spectral properties upon binding. Also, MANT-ATP is a potent inhibitor of adenylate cyclase.

Specification: Aqueous solution of the sodium salt (10 mM). Other salt forms of MANT-ATP are available upon request. Micro molar 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 analysis is better than 95% (HPLC / UV / 255 nm) for mixture of 2'- and 3'- isomers. The product is not sterile and has not been tested for endotoxins.

Stability and Storage: MANT-ATP is relatively 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. Exposure to bright light should be avoided.

Toxicity and Safety: Since ATP has 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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