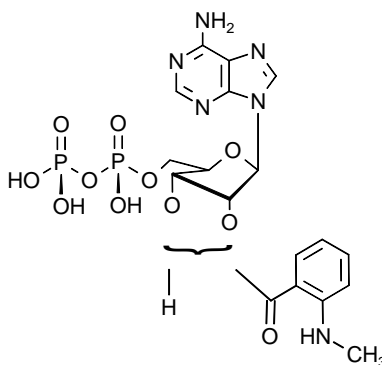


## Technical Information about 2'- / 3'- O- (N'- Methylanthraniloyl)- ADP ( MANT-ADP )

Update: March 16, 2011 WH



**Abbreviation:** MANT-ADP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>18</sub> H <sub>22</sub> N <sub>6</sub> O <sub>11</sub> P <sub>2</sub> (free acid)	[151481-85-5]	560.4 (free acid)	λ <sub>max</sub> 255 nm / ε 22200 / pH 7	M 040

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

**Description:** MANT-ADP is an analogue of the natural structure ADP in which either the ribose 2'- hydroxy or the 3'- hydroxy group has been esterified by the fluorescent methylisatoic acid.

**Properties:** MANT-ADP is a fluorescent analogue of ADP with λ<sub>exc</sub> 355 nm and λ<sub>em</sub> 448 nm, useful for research into ADP-dependent receptor proteins. The MANT fluorophore has a certain sensitivity for its environment and can change its spectral properties upon binding.

**Specification:** Aqueous solution of the sodium salt (10 mM). Other salt forms of MANT-ADP are available upon request. Micro molar quantities are determined by UV at λ<sub>max</sub>. When opening the tube please make sure that no substance 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 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:** MANT-ADP is relatively stable when stored frozen in aqueous solution (- 20° Celsius necessary, - 80° recommended). 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 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 MANT-ADP:

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Cremonesi, C.; Neuron, J.M.; Yount, R.G., *Biochemistry*, **29**, 3309 - 3319 (1989): "Interaction of Myosin Subfragment 1 with Fluorescent Ribose-Modified Nucleotides. A Comparison of Vanadate Trapping and SH1-SH2 Cross-Linking"

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