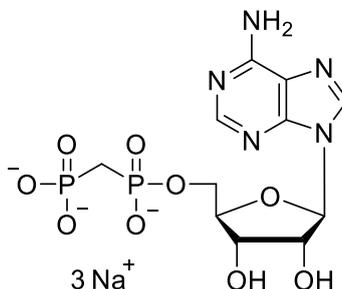


Technical Information about Adenosine- 5'- O- (α, β- methylene)diphosphate (AMP-CP)

Update: October 16, 2018 HU



Abbreviation: AMP-CP

| Formula | CAS No. | Molecular Weight | UV | BIOLOG Cat. No. |
|---|---------------|------------------------|--|-----------------|
| C ₁₁ H ₁₇ N ₅ O ₉ P ₂ for free acid | [104835-70-3] | 425.2 for free acid | λ _{max} 259 nm / ε 15000 / pH 7 | A 070 |

Name: Adenosine- 5'- O- (α, β- methylene)diphosphate

Description: AMP-CP is an analogue of adenosine- 5'- O- diphosphate (ADP) in which the bridging oxygen between the α- and the β-phosphate is replaced by a methylene group.

Properties: Hydrolytically stable analogue of ADP. Inhibitor of ecto-5'-nucleotidase (CD73).

Specification: Sodium salt in aqueous solution (10 mM). The free acid or other salt forms are available upon request. Micro molar quantities are determined by UV at λ_{max}.

Purity: Typical analysis is better than 95% (HPLC / UV / 259 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: AMP-CP has sufficient solubility in water. 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.

Stability and Storage: AMP-CP 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 content of the vial in order to avoid repeated freeze/thawing 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 diphosphates have multiple tasks in every organism, it is 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 AMP-CP:

Synnestvedt, K.; Furuta, G.T.; Comerford, K.M.; Louis, N.; Karhausen, J.; Eltzschig, H.K.; Hansen, K.R.; Thompson, L.F.; Colgan, S.P., *J. Clin. Invest.*, **110**, 993 - 1002 (2002): "Ecto-5'-nucleotidase (CD73) Regulation by Hypoxia-inducible Factor-1 Mediates Permeability Changes in Intestinal Epithelia"

Hoehn, K.; White, T.D., *J. Neurochem.*, **54**, 256 - 265 (1990): "Role of Excitatory Amino Acid Receptors in K⁺- and Glutamate-evoked Release of Endogenous Adenosine from Rat Cortical Slices"