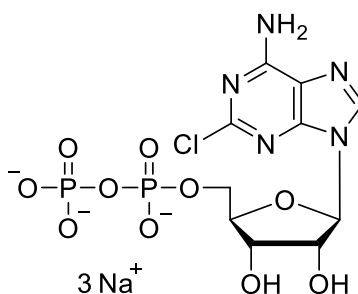


Technical Information about 2-Cl-ADP

Update: May 03, 2021 HJ



Abbreviation: 2-Cl-ADP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₀ H ₁₄ ClN ₅ O ₁₀ P ₂ for free acid	[16506-88-0]	461.7 for free acid	λ _{max} 262 nm / ε 14300 / pH 7	C 055

Name: 2- Chloroadenosine- 5'- O- diphosphate (2-Cl-ADP), sodium salt

Description: 2-Cl-ADP is an analogue of adenosine-5'-diphosphate (ADP) in which the hydrogen in position 2 of the adenine nucleobase has been replaced by a chlorine atom.

Properties: ADP analogue for receptor mapping studies and useful as starting material for 2-modified ADP derivatives.

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}. 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 / 262 nm) at time of quality control and packing. The product is not sterile and has not been tested for endotoxins.

Stability and Storage: 2-Cl-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 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 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!

References for 2-Cl-ADP:

Moseng, M.A.; Nix, J.C.; Page, R.C., *FEBS Lett.*, **15**, 2030 - 2039 (2019): "2- and N6-functionalized Adenosine-5'-diphosphate Analogs for the Inhibition of Mortalin"

Geiger, J., Hönig-Liedl, P.; Schanzenbächer, P.; Walter, U., *Eur. J. Pharmacol.*, **351**, 235 - 246 (1998): "Ligand Specificity and Ticlopidine Effects Distinguish Three Human Platelet ADP Receptors"

Cusack, N.J.; Hourani, S.M.O., *Br. J. Pharmacol.*, **77**, 329 - 333 (1982): "Competitive Inhibition by Adenosine 5'-Triphosphate of the Actions on Human Platelets of 2-Chloroadenosine 5'-Diphosphate, 2-Azidoadenosine 5'-Diphosphate and 2-Methylthioadenosine 5'-Diphosphate"