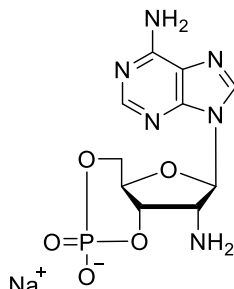


Technical Information about 2'-NH₂-cAMP

Update: August 14, 2018 HU



Abbreviation: 2'-NH₂-cAMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₀ H ₁₂ N ₆ O ₅ P·Na	[85819-83-6]	350.2	λ _{max} 259 nm / ε 15000 / pH 7	A 088

Name: 2'- Amino- 2'- deoxyadenosine- 3', 5'- cyclic monophosphate

Description: 2'-NH₂-cAMP is an analogue of the natural signal molecule cyclic AMP in which the ribose 2'-hydroxyl group is replaced by an amino group.

Properties: 2'-NH₂-cAMP has a reactive amino group suitable for modification with fluorophores and other markers or spacers and can be used as ligand for affinity chromatography of cAMP and cGMP binding proteins that do not require an intact 2'-OH group.

Specification: Crystallized or lyophilized sodium salt. **Please keep in mind that equal concentrations of the compound may look different in volume due to high sensitivity of the lyophilized form to humidity. The compound can even contract to small volume droplets.** Normally the product is located in the conical bottom of the tube. Micromolar quantities are determined by UV at λ_{max}.

Purity: Typical analysis is better than 98% (HPLC / UV / 258 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 2'-NH₂-cAMP has sufficient solubility in water (> 20 mM). Please rinse tube walls carefully and preferably use ultrasonic or vortex to achieve total and uniform mixing. When opening the tube please make sure that no substance is lost within the cap.

Stability and Storage: 2'-NH₂-cAMP is chemically rather stable and does not need special care during handling or shipment. Nevertheless, we recommend that the compound should be stored in the freezer, for longer storage periods preferably in freeze-dried form.

Toxicity and Safety: Since cyclic AMP has multiple tasks in every organism, it is very likely that cAMP 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'-NH₂-cAMP:

Jäger, R.; Russwurm, C.; Schwede, F.; Genieser, H.-G.; Koesling, D.; Russwurm, M., *J. Biol. Chem.*, **287**, 1210 – 1219 (2012): „ Activation of PDE10 and PDE11 Phosphodiesterases“