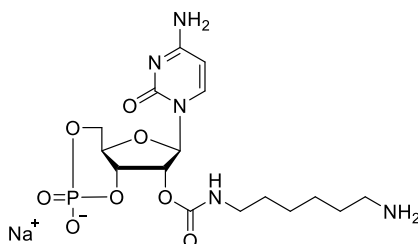


Technical Information about 2'-AHC-cCMP

Update: September 21, 2023 ss



Abbreviation: **2'-AHC-cCMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{16}H_{25}N_5O_8P \cdot Na$	[pending]	469.4	λ_{max} 270 nm / ϵ 9000 / pH 7	A 156

Name: 2'- O- (6- Aminoethylcarbamoyl)cytidine- 3', 5'- cyclic monophosphate (2'-AHC-cCMP), sodium salt

Description: 2'-AHC-cCMP is an analogue of the natural signal molecule cyclic CMP (cCMP, Cat. No. C 001) in which a hexyl spacer with a terminal amino group has been attached to the ribose 2'-hydroxy group by a carbamate bond.

Properties:

- Analogue of cyclic CMP prepared to be coupled to various structures including proteins,
- ligand for immobilization to yield affinity gels,
- also suitable for conjugation with fluorescent dyes or labels.

In spite of its modification, 2'-AHC-cCMP could still be sensitive against phosphodiesterases. For a corresponding PDE-resistant phosphorothioate form (Sp-2'-AHC-cCMPS) please inquire. 2'-AHC-cCMP is also available as a ligand immobilized to agarose (2'-AHC-cCMP-Agarose, Cat. No. A 158).

Specification: Crystallized or lyophilized sodium salt. Please keep in mind that equal concentrations of the compound can appear very different in volume due to 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. Micro molar quantities are determined by UV at λ_{max} .

Purity: Typical analysis is better than 98% (HPLC / UV / 252 nm). The product is not sterile and has not been tested for endotoxins.

Stability and Storage: 2'-AHC-cCMP 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.

Solubility: 2'-AHC-cCMP is readily soluble in water or buffer. When opening the tube please make sure that no substance is lost within the cap. Please rinse tube walls carefully and preferably use ultrasonic or vortex to achieve total and uniform mixing.

Toxicity and Safety: 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 Reference for 2'-AHC-cCMP:

Hammerschmidt, A.; Chatterji, B.; Zeiser, J.; Schröder, A.; Genieser, H.-G.; Pich, A.; Kaefer, V.; Schwede, F.; Wolter, S.; Seifert, R., *PLoS ONE*, 7: e39848 (2012): "Binding of Regulatory Subunits of Cyclic AMP-Dependent Protein Kinase to Cyclic CMP Agarose"