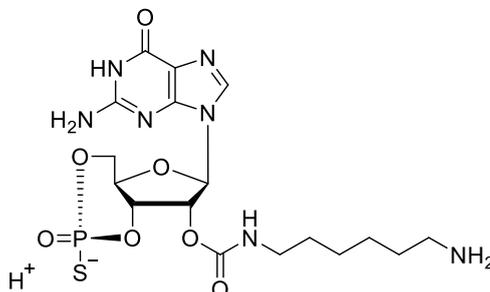


Technical Information about Rp-2'-AHC-cGMPS

Update: August 24, 2018 HU



Abbreviation: **Rp-2'-AHC-cGMPS**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₇ H ₂₆ N ₇ O ₇ PS	[pending]	503.5	λ _{max} 252 nm / ε 14300 / pH 7	A 123

Name: 2'-O- (6- Aminohexylcarbamoyl)guanosine- 3', 5'- cyclic monophosphorothioate, Rp- isomer

Description: Rp-2'-AHC-cGMPS is an analogue of the natural signal molecule cyclic GMP where a hexyl spacer with a terminal amino group has been attached to the ribose 2'- hydroxy group by a carbamate bond. In addition, the exocyclic equatorial oxygen of the cyclic phosphate moiety has been replaced by sulfur.

Properties: Rp-2'-AHC-cGMPS is a PDE-stable cyclic GMP analogue suitable for immobilization as affinity ligand (e.g. for purification of phosphodiesterases) or for coupling of various labelling structures including fluorophores. This structure is also offered as a ligand immobilized to agarose (Rp-2'-AHC-cGMPS-Agarose, Cat. No. A 051), and without sulfur modification (2'-AHC-cGMP, Cat. No. A 048).

Specification: Crystallized or lyophilized solid. Please keep in mind that equal concentrations of the compound may look different in volume due to sensitivity 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 / 252 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: Rp-2'-AHC-cGMPS has sufficient solubility in water or buffer. 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: Rp-2'-AHC-cGMPS has sufficient stability for short term exposure to ambient temperature 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 GMP has multiple tasks in every organism, it is very likely that cGMP 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 Rp-2'-AHC-cGMPS:

References for the new structure Rp-2'-AHC-cGMPS are not yet available. Please compare with a corresponding reference for 2'-AHC-cAMP:

Corrie, J.E.T.; Pizza, C.; Makwana, J.; King, R.W., *Prot. Expr. Purif.*, **3**, 417 - 420 (1992): "Preparation and Properties of an Affinity Support for Purification of Cyclic AMP Receptor Protein from *Escherichia coli*"