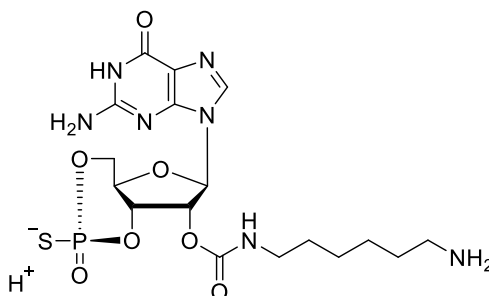


Technical Information about Sp-2'-AHC-cGMPS

Update: August 24, 2018 HU



Abbreviation: **Sp-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 / pH7	A 067

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

Description: Sp-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 In addition, the exocyclic axial oxygen of the cyclic phosphate moiety has been replaced by sulfur.

Properties:

- PDE-resistant analogue of cyclic GMP prepared to be coupled to various structures including proteins
- PDE-resistant ligand for immobilization to yield affinity gels
- also suitable for conjugation with fluorescent dyes or labels

BIOLOG also offers the sulfur-free version of this ligand (2'-AHC-cGMP) as well as 2'-O-monosuccinyl-cGMP which has a terminal carboxy group for reaction with amino and hydroxy group- containing structures.

Specification: Crystallized or lyophilized solid. Please keep in mind that equal concentrations of the compound may look different in volume. 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.

Solubility: Sp-2'-AHC-cGMPS is readily soluble 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 make sure that no substance is lost within the cap.

Stability and Storage: Sp-2'-AHC-cGMPS is chemically rather stable. 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 Sp-2'-AHC-cGMPS:

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

Copyright August 18 by BIOLOG Life Science Institute

- 1 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*"