

## Technical Information about 2'-/3'-AHC-5'-GMP

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## Abbreviation:

## 2'-/3'-AHC-5'-GMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>17</sub> H <sub>28</sub> N <sub>7</sub> O <sub>9</sub> P (free acid)	[pending]	505.4 (free acid)	$\lambda_{\text{max}}$ 252 nm / ε 13500 / pH 7	A 174

Name: 2'- / 3'- O- (2- Aminohexycarbamoyl)guanosine- 5'- O- monophosphate ( 2'-/3'-AHC-5'-GMP ), sodium salt

**Description:** 2'-/3'-AHC-5'-GMP is an analogue of guanosine-5'-O-monophosphate (5'-GMP) in which a hexyl spacer with a terminal amino group has been attached either to the ribose 2'-hydroxy group or to the 3'-hydroxy group by a carbamate bond.

**Properties:** 2'-/3'-AHC-5'-GMP is an analogue of 5'-GMP which is useful as ligand for immobilization and for coupling of various dyes and labels. This ligand is also available with a longer spacer (2'-/3'-AEC-5'-GMP, Cat. No. A 170).

**Specification:** Crystallized or lyophilized sodium salt. Please keep in mind that equal concentrations of the compound may look 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  $\lambda_{max}$ .

Purity: Typical analysis is better than 97% (HPLC / UV / 252 nm). The product is not sterile and has not been tested for endotoxins.

**Solubility:** 2'-/3'-AHC-5'-GMP is readily soluble in water (limits have not been determined). 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'-/3'-AHC-5'-GMP 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 5'-GMP has multiple tasks in every organism, it is not unlikely that lipophilic 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!

**Selected References for 2'-/3'-AHC-5'-GMP:** 2'-/3'-AHC-5'-GMP is a new structure which has been synthesized by BIOLOG Life Science Institute for the first time. There are no corresponding references available at present.