

Technical Information about c[3'-Biotin-16-G(2',5')pA(3',5')p]

Biotinylated analogue of the metazoan cyclic dinucleotide second messenger c[G(2',5')pA(3',5')p]

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Abbreviation: c[3'-Biotin-16-G(2',5')pA(3',5')p] / c[3'-[Biotin]-AHC-G(2',5')pA(3',5')p]

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₄₃ H ₆₃ N ₁₅ O ₁₇ P ₂ S (free acid)	[pending]	1156.1 (free acid)	λ _{max} 258 nm / ε 25050 / pH 7	C 196

Name: Cyclic (3'- O- (6- (6- [biotinyl]aminohexanoyl)aminohexylcarbamoyl)guanosine- (2' -> 5')- monophosphate- adenosine- (3' -> 5')- monophosphate)

Syn.: c-3'-Biotin-AHC-GAMP(2'-5') / 2'3'-c-3'-Biotin-AHC-GAMP / 2',5'-3',5'-c-3'-Biotin-AHC-GAMP

Description: c[3'-Biotin-16-G(2',5')pA(3',5')p] is an analogue of the metazoan cyclic dinucleotide second messenger c[G(2',5')pA(3',5')p] (2'3'-cGAMP, Cat. No. C 161) in which the biotin label is attached to the 3'-hydroxy group of the guanosine via a 16-atom spacer.

Properties: Analogue with biotin conjugate probably suitable as tracer in immunoassays, for affinity chromatography or pull-down assays.

The parent compound c[G(2',5')pA(3',5')p] (Cat. No. C 161) was found to be the metazoan second messenger produced by the mammalian innate immune DNA sensor cGAMP synthase (cGAS).

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 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 95% (HPLC / UV / 258 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: c[3'-Biotin-16-G(2',5')pA(3',5')p] is soluble in water (≥ 1.7 mM, 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: c[3'-Biotin-16-G(2',5')pA(3',5')p] has sufficient stability at room 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: 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 c[3'-Biotin-16-G(2',5')pA(3',5')p]: c[3'-Biotin-16-G(2',5')pA(3',5')p] 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.

Selected References for the Parent Compound c[G(2',5')pA(3',5')p]:

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