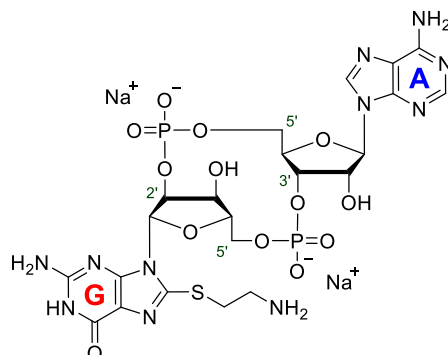


## Technical Information about c[8-AET-G(2',5')pA(3',5')p]

Update: August 06, 2019 HU



**Abbreviation:** c[8-AET-G(2',5')pA(3',5')p]

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>22</sub> H <sub>29</sub> N <sub>11</sub> O <sub>13</sub> P <sub>2</sub> S (free acid)	[pending]	749.6 (free acid)	λ <sub>max</sub> 265 nm / ε 23500 / pH 7	C 175

**Name:** Cyclic (8-(2-aminoethylthio)guanosine-(2' → 5')-monophosphate-adenosine-(3' → 5')-monophosphate)  
 Syn.: 8-AET-cGAMP(2'-5') / 8-AET-2'3'-cGAMP / 8-AET-2',5'-3',5'-cGAMP

**Description:** c[8-AET-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] (*aka* cGAMP(2'-5') or 2'3'-cGAMP, Cat. No. C 161) in which the hydrogen in position 8 of the guanine nucleobase is replaced by an aminoethylthio group.

**Properties:** c[8-AET-G(2',5')pA(3',5')p] can be used as a precursor for modification with fluorophores and other markers. It is also suitable as a ligand for immobilization to yield affinity gels. 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<sub>max</sub>.

**Purity:** Typical analysis is better than 95% (HPLC / UV / 265 nm). The product is not sterile and has not been tested for endotoxins.

**Solubility:** The solubility of c[8-AET-G(2',5')pA(3',5')p] in water is limited to 25 mM. 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[8-AET-G(2',5')pA(3',5')p] 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.

**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[8-AET-G(2',5')pA(3',5')p]:** c[8-AET-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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Sun, L.; Wu, J.; Du, F.; Chen, X.; Chen, Z.J., *Science*, **339**, 786 - 791 (2013): "Cyclic GMP-AMP Synthase is a Cytosolic DNA Sensor That Activates the Type I Interferon Pathway"