Abbreviation: c[A(2',5')pG(3',5')p]

<table>
<thead>
<tr>
<th>Formula</th>
<th>CAS No.</th>
<th>Molecular Weight</th>
<th>UV</th>
<th>BIOLOG Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C$<em>{20}$H$</em>{24}$N$<em>{10}$O$</em>{13}$P$_{2}$</td>
<td>[1615704-64-7]</td>
<td>674.4 (free acid)</td>
<td>$\lambda_{\text{max}}$ 256 nm / $\varepsilon$ 25050 / pH 7</td>
<td>C 238</td>
</tr>
</tbody>
</table>

Name: Cyclic (adenosine- (2' -> 5')-monophosphate- guanosine- (3' -> 5')-monophosphate) (c[A(2',5')pG(3',5')p] / 3'2'-cGAMP / 3',5'-2',5'-cGAMP), sodium salt

Description: c[A(2',5')pG(3',5')p] is a non-canonical cyclic dinucleotide in which a 5'-AMP unit is connected with a 5'-GMP unit via a 2'-5' and a 3'-5' phosphodiester bond to form a cyclic structure.

Properties: c[A(2',5')pG(3',5')p] is a cyclic dinucleotide structurally related to the metazoan second messenger and STING activator c[G(2',5')pA(3',5')p] (2'3'-cGAMP, Cat. No. C 161). c[A(2',5')pG(3',5')p] was reported to be a new nucleotide second messenger that controls immune activation in Drosophila melanogaster (Slavik et al. 2021, Holleufer et al. 2021) and has also been identified as a signalling product produced by the bacterial CD-NTase enzyme Asticcacaulis sp. CdnG (Fatma et al. 2021).

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. Micromolar quantities are determined by UV at $\lambda_{\text{max}}$.

Purity: Typical analysis is better than 98% (HPLC / UV / 256 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: c[A(2',5')pG(3',5')p] is soluble in water ($\geq 10$ 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[A(2',5')pG(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 contact with eyes and skin 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[A(2',5')pG(3',5')p]:

