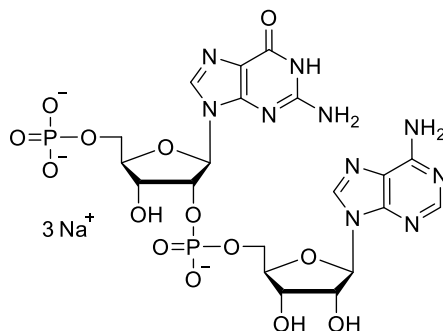


Technical Information about 5'- Phosphoguanlyl- (2' → 5')- adenosine

Update: August 09, 2019 HU



Abbreviation: **pG(2',5')pA / 5'-p(rG)(2',5')p(rA)**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₂₀ H ₂₆ N ₁₀ O ₁₄ P ₂ (free acid)	[55779-55-0]	692.4 (free acid)	λ _{max} 256 nm / ε 25050 / pH 7	P 081

Name: 5'- Phosphoguanlyl- (2' → 5')- adenosine

Description: In pG(2',5')pA a 5'-GMP unit is connected with a 5'-AMP unit via a 2' → 5' linkage to form a linear dinucleotide.

Properties: pG(2',5')pA is a linear dinucleotide and potential degradation product of the metazoan cyclic dinucleotide second messenger 2'3'-cGAMP (c[G(2',5')pA(3',5')p], our Cat. No. C 161).

Specification: Crystallized or lyophilized sodium salt. The free acid or other salt forms are available upon request. 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 λ_{max}.

Purity: Typical analysis is better than 95% (HPLC / UV / 256 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: pG(2',5')pA is soluble to at least 5.1 mM 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: pG(2',5')pA 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: 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 pG(2',5')pA:

Gao, P.; Ascano, M.; Wu, Y.; Barchet, W.; Gaffney, B.L.; Zillinger, T.; Serganov, A.A.; Liu, Y.; Jones, R.A.; Hartmann, G.; Tuschl, T.; Patel, D.J., *Cell*, **153**, 1094 - 1107 (2013): "Cyclic [G(2',5')pA(3',5')p] Is the Metazoan Second Messenger Produced by DNA-Activated Cyclic GMP-AMP Synthase"