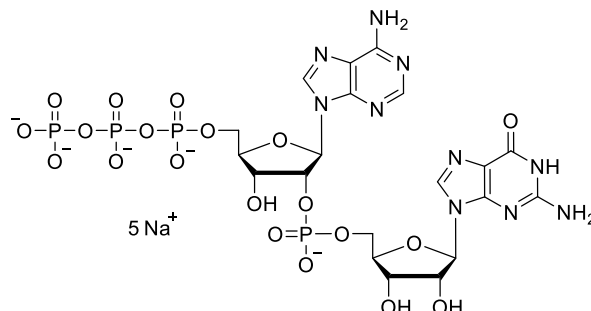


Technical Information about pppA(2',5')pG

Update: June 21, 2023 ss



Abbreviation: pppA(2',5')pG

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₂₀ H ₂₈ N ₁₀ O ₂₀ P ₄ (for free acid)	[pending]	852.4 (for free acid)	λ _{max} 256 nm / ε 25050 / pH 7	T 074

Name: 5'- Triphosphoadenylyl- (2' → 5')- guanosine (pppA(2',5')pG), sodium salt

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

Properties: pppA(2',5')pG is the linear intermediate in the two-step enzymatic production of the signalling nucleotide 3'2'-cGAMP (Cat. No. C 238) by the *Drosophila melanogaster* enzyme cGAS-like Receptor 1 (cGLR1) in response to dsRNA (Slavik et al. 2021).

Specification: Aqueous solution of the sodium salt (10 mM). Other salt forms of pppA(2',5')pG may be available upon request. Micromolar quantities are determined by UV at λ_{max}. When opening the tube please make sure that no liquid is lost within the cap. A short spin-down in a bench centrifuge is recommended before use.

Purity: Typical purity is better than 95% (HPLC / UV / 256 nm) at time of quality control and packing. However, actual purity depends on storage and transport conditions. The product is not sterile and has not been tested for endotoxins.

Stability and Storage: pppA(2',5')pG is most stable when stored as aqueous solution in the freezer (- 20° Celsius necessary, - 70° recommended), however, at ambient temperature the compound slowly starts to decompose. Thus, in order to maintain its original high quality it is recommended to allow thawing only before using the product. If you will not use up the vial with one application, please aliquot the contents of the vial in order to avoid repeated freeze/thaw cycles for the rest. When making such aliquots, be sure to operate quickly and to freeze the vial again as soon as possible.

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 Reference for pppA(2',5')pG:

Slavik K. M.; Morehouse B. R.; Ragucci A. E.; Zhou W.; Ai X.; Chen Y.; Li L.; Wei Z.; Bähre H.; König M.; Seifert R.; Lee A.S.Y.; Cai H.; Immler J.L.; Kranzusch P.J., *Nature*, **597**, 109 - 113 (2021): "cGAS-Like Receptors Sense RNA and Control 3'2'-cGAMP Signalling in *Drosophila*"