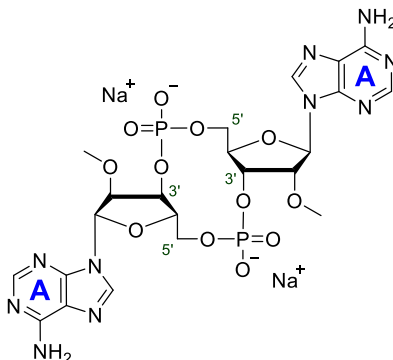


## Technical Information about 2',2''-Di-O-Me-c-diAMP

Update: August 08, 2019 HU



**Abbreviation:** **2',2''-Di-O-Me-c-diAMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>22</sub> H <sub>28</sub> N <sub>10</sub> O <sub>12</sub> P <sub>2</sub> (free acid)	[1427269-46-2]	686.5 (free acid)	λ <sub>max</sub> 259 nm / ε 27000 / pH 7	D 154

**Name:** 2'- , 2''- O- (Di- methyl)- cyclic diadenosine monophosphate

**Description:** In 2',2''-Di-O-Me-c-diAMP two 5'-AMP units are connected to form a cyclic structure. In addition, both ribose 2'-hydroxy groups have been methylated.

**Properties:** 2',2''-Di-O-Me-c-diAMP is an analogue of the bacterial second messenger c-diAMP (Cat. No. C 088) which can be useful in studies on ligand-receptor interactions. The mono-methylated c-diAMP analogue 2'-O-Me-c-diAMP (Cat. No. M 085) is also offered.

**Specification:** Lyophilized or crystallized sodium salt. Other salt forms are available upon request. Equal concentrations of 2',2''-Di-O-Me-c-diAMP can appear very 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<sub>max</sub>.

**Purity:** Typical analysis is better than 95% (HPLC / UV 259 nm). The product is not sterile and has not been tested for endotoxins.

**Solubility:** 2',2''-Di-O-Me-c-diAMP is soluble to at least 4 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:** 2',2''-Di-O-Me-c-diAMP has sufficient stability at room temperature and does not need special care during handling or shipment. Nevertheless, 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 Reference for the Structurally Related Compound 2',2''-Di-O-Me-c-diGMP (Cat. No. D 136):**

Smith, K.D.; Shanahan, C.A.; Moore, E.L.; Simon, A.C.; Strobel, S.A., *Proc. Natl. Acad. Sci. USA*, **108**, 7757 - 7762 (2011):  
"Structural Basis of Differential Ligand Recognition by Two Classes of Bis-(3'-5')-Cyclic Dimeric Guanosine Monophosphate-Binding Riboswitches"