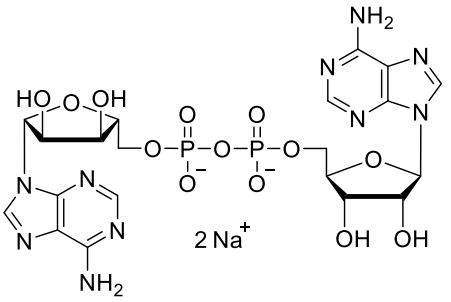
Technical Information about P^1,P^2-Di-(adenosine-5')-diphosphate

Update: April 15, 2019 HJ



Abbreviation: **Ap_2A / AppA**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{20}H_{26}N_{10}O_{13}P_2$ (free acid)	[85065-24-3]	676.4 (free acid)	λ_{max} 259 nm / ε 27000 / pH 7	D 054

Name: P^1, P^2- Di- (adenosine- 5')- diphosphate / Diadenosine(5', 5')pyrophosphate / P^1- (5'- Adenosyl)- P^2- (5'- adenosyl)- diphosphate

Description: In Ap_2A two adenosine moieties are linked via their 5' positions by two phosphate groups.

Specification: Lyophilized or crystallized sodium salt. The free acid or other salt forms are available upon request. Equal concentrations of Ap_2A 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_{max}.

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

Solubility: Ap_2A is soluble in water and aqueous buffers. 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: Ap_2A 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 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 Ap_2A:

Pojoga, L.H.; Haghiac, M.; Hildermann, R.H., *Biochem. Pharmacol.*, **64**, 405 - 412 (2002): "Inhibition of Adenine Dinucleotides of ATP-induced Prostacyclin Release by Bovine Aortic Endothelial Cells"

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Haghiac, M.; Pojoga L.H.; Hildermann, R.H., *Cell. Signal.*, **13**, 145 - 150 (2001): "Studies on the Effect of Diadenylated Nucleotides on Calcium Mobilization and Prostacyclin Synthesis in Bovine Aortic Endothelial Cells"

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