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Technical Information about
Purine riboside- 5'- O-monophosphate (5'-PuMP)

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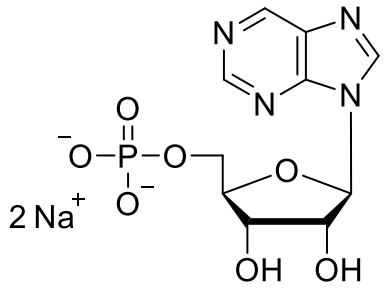

Abbreviation: **5'-PuMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{10}H_{13}N_4O_7P$ for free acid	[13484-60-1]	332.2 for free acid	λ_{max} 263 nm / ε 8000 / pH 7	P 011

Name: Purine riboside- 5'- O- monophosphate

Description: 5'-PuMP is an analogue of adenosine- 5'- O- monophosphate (5'-AMP) in which the amino group in position 6 of the adenine nucleobase has been replaced by hydrogen.

Properties: Potential substrate, competitive inhibitor or regulator of enzymes that interact with adenosine- 5'- O- monophosphate.

Specification: Crystallized or lyophilized sodium salt. Other salt forms of 5'-PuMP are available upon request. Please keep in mind that equal amounts of the compound may look different in volume. Micro molar quantities are determined by UV at λ_{max}.

Purity: Typical analysis is better than 97% (HPLC / UV / 263 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 5'-PuMP has excellent solubility in water or buffer systems. 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: 5'-PuMP 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: Since 5'-AMP has multiple tasks in every organism, it is not unlikely that its analogues will interfere with many cell regulation processes *in vivo*. However, due to the rather small quantities to work with, no health hazards have been reported. Nevertheless 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!

Reference for 5'-PuMP:

Kozlowska, M.; Smolenski, R.T.; Makarewicz, W.; Hoffmann, C.; Jastorff, B.; Swierczynski, J. ,*Toxicol. Lett.*, **104**, 171 - 181 (1999): "ATP Depletion, Purine Riboside Triphosphate Accumulation and Rat Thymocyte Death Induced by Purine Riboside"

Morange, M.; Blanco, F.G.; Vandenbunder, B.; Buc, H., *Eur. J. Biochem*., **65**, 553 - 563 (1976): "AMP Analogs: Their Function in the Activation of Glycogen Phosphorylase B"

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