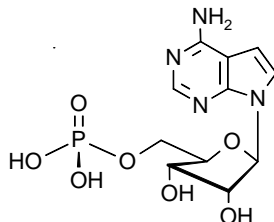


Technical Information about 7- Deazaadenosine- 5'- O- monophosphate (7-CH-5'-AMP / 5'-TuMP)

Update: October 25, 2012 MP



Abbreviation: 5'-TuMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₁ H ₁₅ N ₄ O ₇ P for free acid	[16719-46-3]	346.2	λ _{max} 269 nm / ε 12000 / pH7	D 032

Name: 7-Deazaadenosine- 5'- O- monophosphate (Tubercidin- 5'- O- monophosphate)

Description: 5'-TuMP is an analogue of adenosine- 5'- O- monophosphate (5'-AMP), where the nitrogen atom in position 7 of the adenine imidazole ring has been replaced by carbon, and hydrogen, respectively.

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

Specification: Crystallized or lyophilized sodium salt. Other salts of 5'-TuMP 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/ 269 nm). The product is not sterile.

Solubility: 5'-TuMP 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 make sure that no substance is lost within the cap.

Stability and Storage: 5'-TuMP 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 AMP has multiple tasks in every organism, it is not unlikely that its analogs 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!

P.t.o.

Selected References for 5'-TuMP:

Minelli, A.; Moroni, M.; Mezzasoma, I.; Skladanowski, A.C., *Mol. Genet. Metab.*, **66**, 49 - 55 (1999): "Activity of IMP- and AMP-Preferring Isoforms of 5'-Nucleotidase from Human Seminal Plasma with AMP Analogues"

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