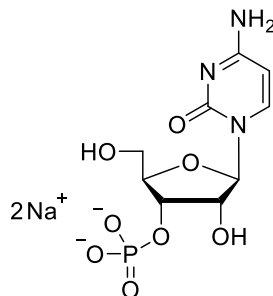


Technical Information about 3'-CMP

Update: October 12, 2018 HU



Abbreviation:

3'-CMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₉ H ₁₄ N ₃ O ₈ P (free acid)	[84-52-6]	323.2 (free acid)	λ _{max} 271 nm / ε 9000 / pH 7	C 094

Name: Cytidine- 3'- O- monophosphate

Description: In 3'-CMP a phosphate group is attached to the ribose 3' hydroxy group of cytidine.

Properties: 3'-CMP is formed during enzymatic hydrolysis of cytidine-2',3'-cyclic monophosphate by 2',3'-cyclic nucleotide 2'-phosphodiesterase.

Specification: Crystallized or lyophilized sodium salt. For other salt forms please inquire. Please keep in mind that equal concentrations of the compound may look different in volume due to high 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 / 271 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 3'-CMP is soluble to at least 13 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: 3'-CMP is chemically rather stable 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 nucleoside monophosphates have multiple tasks in every organism, it is very likely that corresponding 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!

Selected References for 3'-CMP:

Fernandez-Centeno, E.; Heredia, C.F., *Comp. Biochem. Physiol. B Biochem. Mol. Biol.*, **125**, 161 - 167 (2000): "2',3'-cyclic nucleotide 2'-phosphodiesterase from *Fusarium culmorum*"

Morishima, I., *Biochim. Biophys. Acta*, **370**, 227 - 241 (1974): "Cyclic Nucleotide Phosphodiesterase in Silkworm: Purification and Properties"