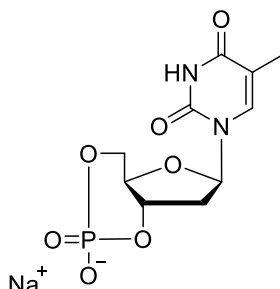


## Technical Information about cTMP

Update: August 06, 2018 HU



**Abbreviation:** cTMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>10</sub> H <sub>12</sub> N <sub>2</sub> O <sub>7</sub> P·Na	[76567-90-3]	326.2	λ <sub>max</sub> 267 nm / ε 9600 / pH 7	T 005

**Name:** Thymidine- 3', 5'- cyclic monophosphate

**Description:** cTMP is a cyclic nucleotide with a pyrimidine nucleobase.

**Properties:** cTMP can be used in receptor mapping studies.

**Specification:** Crystallized or lyophilized sodium salt. For other salt forms or analogues of cTMP 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<sub>max</sub>.

**Purity:** Typical analysis is better than 98% (HPLC / UV / 267 nm). The product is not sterile and has not been tested for endotoxins.

**Solubility:** cTMP is soluble in water (≥ 16 mM). 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:** cTMP 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:** 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 cTMP:

Reinecke, D.; Burhenne, H.; Sandner, P.; Kaever, V.; Seifert, R., *FEBS Lett.*, **585**, 3259 – 3262 (2011): „Human Cyclic Nucleotide Phosphodiesterases Possess a Much Broader Substrate-Specificity than Previously Appreciated”

Riegel, J.A.; Maddrell, S.H.; Farndale, R.W.; Caldwell, F.M., *J. Exp. Biol.*, **201**, 3411 - 3418 (1998): "Stimulation of Fluid Secretion of Malpighian Tubules of *Drosophila melanogaster* meig. by Cyclic Nucleotides of Inosine, Cytidine, Thymidine and Uridine"