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Technical Information about 2-Cl-cIMP

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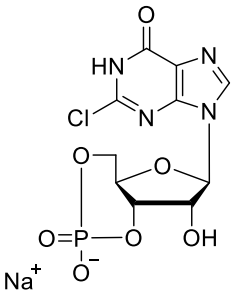

Abbreviation: **2-Cl-cIMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{10}H_9ClN_4O_7P{\cdot}Na$	[52301-30-1]	386.6	λ_{max} 255 nm / ε 13100 / pH 7	C 029

Name: 2- Chloroinosine- 3', 5'- cyclic monophosphate

Description: 2-Cl-cIMP is an analogue of inosine-3',5'-cyclic monophosphate (cIMP, Cat. No. I 001) in which the hydrogen in position 2 is replaced by a chlorine atom.

Specification: Crystallized or lyophilized sodium salt. For other salt forms of 2-Cl-cIMP 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 98% (HPLC / UV / 255 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 2-Cl-cIMP is soluble in water (≥ 12.5 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: 2-Cl-cIMP 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 cyclic AMP and cyclic GMP have multiple tasks in every organism, it is not unlikely that the structurally related 2-Cl-cIMP 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 Reference for 2-Cl-cIMP:

Hebert, M.C.; Schwede, F.; Jastorff, B.; Cote, R.H., *J. Biol. Chem.*, **273**, 5557 - 5565 (1998): "Structural Features of the Noncatalytic cGMP Binding Sites of Frog Photoreceptor Phoshodiesterase Using cGMP Analogs"

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