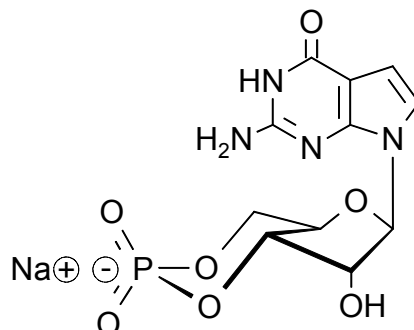


## Technical Information about 7- Deaza- cGMP

Update: March 26, 2009 AI



**Abbreviation:** 7-CH-cGMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>11</sub> H <sub>12</sub> N <sub>4</sub> O <sub>7</sub> P·Na	[81611-03-2]	366.2	λ <sub>max</sub> 260 nm / ε 10600 / pH 7	D 099

**Name:** 7- Deazaguanosine- 3', 5'- cyclic monophosphate

**Description:** 7-CH-cGMP is an analogue of the natural second messenger cyclic GMP in which a ring nitrogen in position 7 of the guanine nucleobase has been replaced by carbon.

**Properties:** 7-CH-cGMP can be used in receptor mapping studies.

**Specification:** Crystallized or lyophilized sodium salt. Other salt forms are available upon request. Please keep in mind that equal concentrations of the compound may look different in volume due to 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 / 260 nm). The product is not sterile and has not been tested for endotoxins.

**Solubility:** 7-CH-cGMP is soluble in water (≥ 15 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:** 7-CH-cGMP 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 GMP has multiple tasks in every organism, it is very likely 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!**

### Selected Reference for 7-CH-cGMP:

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 Phosphodiesterase Using cGMP Analogs"