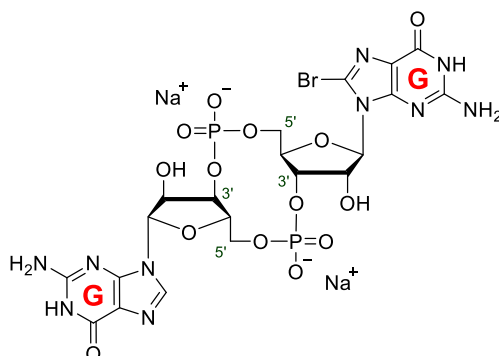


Technical Information about 8-Br-c-diGMP

Analogue of the bacterial second messenger c-diGMP

Update: April 18, 2019 HJ



Abbreviation: **8-Br-c-diGMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₂₀ H ₂₃ BrN ₁₀ O ₁₄ P ₂ (free acid)	[pending]	769.3 (free acid)	λ _{max} 257 nm / ε 25500 / pH 7	B 099

Name: 8- Bromo- cyclic diguanosine monophosphate

Description: In 8-Br-c-diGMP two 5'-GMP units are connected to form a cyclic structure. In addition, the hydrogen in position 8 of one of the two heterocyclic nucleobases is replaced by a bromine atom.

Properties: 8-Br-c-diGMP is a mono-functionalized analogue of the bacterial second messenger c-diGMP (Cat. No. C 057). It can be used for binding studies and as precursor for further modifications with spacers or labels.

Specification: Crystallized or lyophilized sodium salt. 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 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 / 257 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-Br-c-diGMP is soluble in water (≥ 7 mM, 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: 8-Br-c-diGMP 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: 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 8-Br-c-diGMP: 8-Br-c-diGMP is a new structure which has been synthesized by BIOLOG Life Science Institute for the first time. There are no corresponding references available at present.