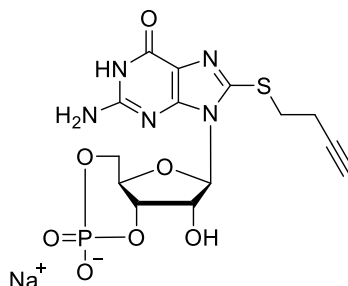


Technical Information about 8-Bu(3-yne)T-cGMP

Update: July 1, 2019 HGG



Abbreviation: 8-Bu(3-yne)T-cGMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₄ H ₁₅ N ₅ O ₇ PS · Na	[2201859-36-9]	451.3	λ _{max} 275 nm / ε 14000 / pH 7	B 185

Name: 8- (3- Butynylthio)guanosine- 3', 5'- cyclic monophosphate (8-Bu(3-yne)T-cGMP)

Description: Functionalized cGMP analogue with a terminal alkyne group which can be used for copper-catalyzed azide-alkyne cycloaddition (CuAAC) "click chemistry" reactions with azide-containing molecules.

Properties: Functionalized cGMP analogue for "click chemistry" reactions.

Specification: Lyophilized or crystallized sodium salt. For other salt forms please inquire. Please keep in mind that equal amounts of the compound may look different in volume. 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 weight.

Purity: Typical analysis is better than 95% (HPLC / UV / 275 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-Bu(3-yne)T-cGMP is soluble 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: 8-Bu(3-yne)T-cGMP 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!

For application references please compare:

1. Presolski, S.I.; Hong, V.P.; Finn, M.G., *Curr. Protoc. Chem. Biol.*, **3**, 153 - 162 (2011): "Copper-Catalyzed Azide-Alkyne Click Chemistry for Bioconjugation"
2. Hong, V.P.; Presolski, S.I.; Ma, C.; Finn, M.G., *Angew. Chem. Int. Ed. Engl.*, **48**, 9879 - 9883 (2009): "Analysis and optimization of copper-catalyzed azide-alkyne cycloaddition for bioconjugation"