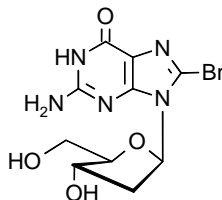


Technical Information about 8- Bromo- 2'- deoxyguanosine

Update: October 23, 2012 MP



Abbreviations:

8-Br-dGuo

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₀ H ₁₂ BrN ₅ O ₄	[13389-03-2]	346.2	λ _{max} 258 nm / ε 15000 / pH7	B 021

Name: 8- Bromo- 2'- deoxyguanosine

Description: 8- Bromo- 2'- deoxyguanosine is an analogue of 2'- deoxyguanosine where the hydrogen in position 8 of the guanine nucleobase has been replaced by bromine.

Properties: Analogue of potential interest in research on bromine-stressed DNA.

Specification: Crystallized or lyophilized solid. Please keep in mind that equal amounts of the compound may look different in volume. Micromolar quantities are determined by UV at λ_{max}.

Purity: Typical analysis is better than 98% (HPLC / UV/ 258 nm). The product is not sterile.

Solubility: Due to its increased lipophilicity the solubility of 8- bromo- 2'- deoxyguanosine in water or buffer is limited. Please rinse tube walls carefully and preferably use ultrasonic or vortex to achieve total and uniform mixing. When opening the tube make sure that no substance is lost within the cap.

Stability and Storage: 8- Bromo- 2'- deoxyguanosine 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!

References for the corresponding 8- Bromo- 2'- deoxyguanosine:

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Shen, Z.; Mitra, S.N.; Wu, W.; Chen, Y.; Yang, Y.; Qin, J.; Hazen, S.L., *Biochemistry*, **40**, 2041 - 2051 (2001): "Eosinophil Peroxidase Catalyzes Bromination of Free Nucleosides and Double-Stranded DNA"

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Lin, T.-S.; Cheng, J.-C.; Ishiguro, K.; Sartorelli, A.C., *J. Med. Chem.*, **28**, 1194 - 1198 (1985): "8-Substituted Guanosine and 2'-Deoxyguanosine Derivates as Potential Inducers of the Differentiation of Friend Erythroleukemia"