Technical Information about 3'-Amino-3'-deoxyguanosine

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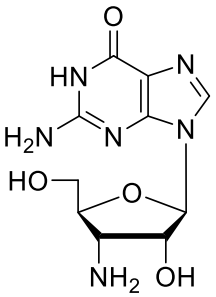

Abbreviation: **3'-AdG**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{10}H_{14}N_6O_4$	[80015-76-5]	282.3 (for free base)	λ_{max} 252 nm / ε 13500 / pH 7	A 064

Name: 3'- Amino- 3'- deoxyguanosine

Description: 3'-AdG is an analogue of guanosine in which the ribose 3'-hydroxyl group is replaced by an amino group.

Properties: 3'-AdG can be used as starting material for corresponding nucleotide syntheses.

Specification: Lyophilized or crystallized solid. Equal concentrations of 3'-AdG can appear very different in volume depending on 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 / 252 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 3'-AdG has limited solubility in water (approx. 2 mM), however, it is better soluble in 1:1 DMSO/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: 3'-AdG 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 guanosine 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 3'-AdG:

Zielinski, W.S.; Orgel, L.E., *Nucleic Acids Res.*, **13**, 2469 - 2484 (1985): "Oligomerization of Activated Derivatives of 3'-Amino-3'-deoxyguanosine on Poly(C) and Poly(dC) Templates"

Kissman, H.M.; Hoffman, A.S.; Weiss, M.J., *J. Med. Chem.*, **6**, 407 - 409 (1963): "Analogs of the Aminonucleoside Derived from Puromycin. The Synthesis of 3'-Amino-3'-Deoxyguanosine and 3'-Amino-3'-Deoxycrotonoside"

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