Technical Information about 8- Azidoadenosine

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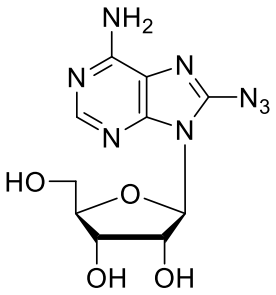

Abbreviation: **8-N_3-Ado**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{10}H_{12}N_8O_4$	[4372-67-2]	308.3	λ_{max} 281 nm / ε 13000 / pH 6	A 045

Name: 8- Azidoadenosine

Description: 8-N_3-Ado is an analogue of adenosine in which the hydrogen in position 8 of the adenine nucleobase is replaced by an azido group.

Properties: 8-N_3-Ado is especially sensitive towards UV light, which yields an active intermediate to react with several sites of peptide amino acids and to immobilize adenosine within a given receptor pocket.

Specification: Crystallized or lyophilized solid. Please keep in mind that equal amounts of the compound may look 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 95% (HPLC / UV / 281 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: Due to its increased lipophilicity the solubility of 8-N_3-Ado in water or buffer is limited. It is a good idea to dissolve first in a small volume of dimethyl sulfoxide (DMSO) and to pipet subsequently into the aqueous stock solution needed. 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-N_3-Ado is light-sensitive and hence should be kept in the dark. If protected properly from light, 8-N_3-Ado 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: Since adenosine 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 References for 8-N_3-Ado:

Viswanadhan, V.N.; Ghose, A.K.; Weinstein, J.N., *Biochim. Biophys. Acta*, **1039**, 356 - 366 (1990): "Mapping the Binding Site of the Nucleoside Transporter Protein: A 3D-QSAR Study"

Jarvis, S.M.; Young, J.D.; Wu, J.S.; Belt, J.A.; Paterson, A.R., *J. Biol. Chem.*, **261**, 11077 - 11085 (1986): "Photoaffinity Labeling of the Human Erythrocyte Glucose Transporter with 8-Azidoadenosine"

BIOLOG Life Science Institute, Bremen, Germany Phone: 49 (0) 421 591355 Fax: 49 (0) 421 5979713 e-mail: service@biolog.de