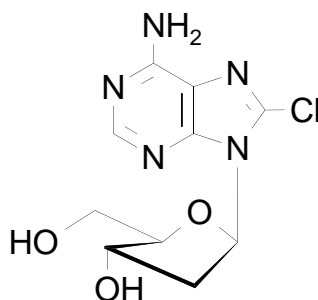


Technical Information about 8-Chloro-2'-deoxyadenosine

Update: June 4, 2012 AI



Abbreviations:

8-Cl-dAdo

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₀ H ₁₂ ClN ₅ O ₃	[85562-55-6]	285.7	λ _{max} 262 nm / ε 17000 / pH 7	C 024

Name: 8- Chloro- 2'- deoxyadenosine

Description: 8-Cl-dAdo is an analogue of 2'-deoxyadenosine in which the hydrogen in position 8 of the adenine nucleobase has been replaced by chlorine.

Properties: 8-Cl-dAdo is a lipophilic analogue of 2'-deoxyadenosine which may be of interest as reference material in research on chlorine-stressed DNA (for 8-Cl-dATP please inquire).

Specification: Crystallized or lyophilized solid. 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 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 / 262 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: Due to its increased lipophilicity the solubility of 8-Cl-dAdo 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 please make sure that no substance is lost within the cap.

Stability and Storage: 8-Cl-dAdo 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-Cl-dAdo:

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Coomber, D.W.; O'Sullivan, W.J.; Gero, A.M., *Int. J. Parasitol.*, **24**, 357 - 365 (1994): "Adenosine Analogues as Antimetabolites against Plasmodium falciparum Malaria"

Bennett, L.L.; Chang, C.-H.; Allan, P.W.; Adamson, D.J.; Rose, L.M.; Brockman, R.W.; Secrist III, J.A.; Shortnacy, Montgomery, J.A., *Nucleosides & Nucleotides*, **4**, 107 - 116 (1985): "Metabolism and Metabolic Effects of Halopurine Nucleosides in Tumor Cells in Culture"

Huang, M.C.; Montgomery, J.A.; Thorpe, M.C.; Stewart, E.L.; Secrist III, J.A., Blakley R.L., *Arch. Biochem. Biophys.*, **222**, 133 - 144 (1983): "Formation of 3-(2'-Deoxyribofuranosyl) and 9-(2'-Deoxyribofuranosyl) Nucleosides of 8-substituted Purines by Nucleoside Deoxyribosyltransferase"