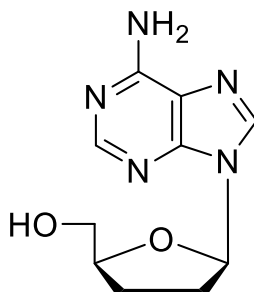


Technical Information about 2', 3'- Dideoxyadenosine (ddA)

Inhibitor of some adenine nucleosides and nucleotides proteins such as adenylate cyclase or adenosine deaminase

Update: September 21, 2018 HU



Abbreviation:

ddA

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₀ H ₁₃ N ₅ O ₂	[4097-22-7]	235.3	λ _{max} 259 nm / ε 15000 / pH 7	D 002

Name: 2',3'-Dideoxyadenosine

Description: 2',3'-Dideoxyadenosine is an analogue of the natural effector adenosine in which both ribose hydroxy groups in positions 2' and 3' have been removed.

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

Purity: Typical analysis is better than 98% (HPLC / UV / 259 nm). The product is not sterile and has not been tested for endotoxins.

Stability and Storage: 2',3'-Dideoxyadenosine 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.

Toxicity and Safety: Since adenosine has multiple tasks in every organism, it is very likely that adenosine 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!

References for 2',3'-Dideoxyadenosine:

Drolet, P.; Bilodeau, L.; Chorvatova, A.; Laflamme, L.; Gallo-Payet, N.; Payet, M.D., *Mol. Endocrinol.*, **11**, 503 - 514 (1997): "Inhibition of the T-Type Ca²⁺ Current by the Dopamine D1 Receptor in Rat Adrenal Glomerulosa Cells: Requirement of the Combined Action of the G betagamma Protein Subunit and Cyclic Adenosine 3',5'-monophosphate"

Nair, V.; Sells, T.B., *Biochim. Biophys. Acta*, **1119**, 201 - 204 (1992): "Interpretation of the Roles of Adenylosuccinate Lyase and of AMP Deaminase in the Anti-HIV Activity of 2',3'-dideoxyadenosine and 2',3'-dideoxyinosine"

Suzuki, S.; Lee, B.; Luo, W.; Tovell, D.; Robins, M.J.; Tyrrell, D.L.J., *Biochem. Biophys. Res. Commun.*, **156**, 1144 - 1151 (1988): "Inhibition of Duck Hepatitis B Virus Replication by Purine 2',3'-Dideoxynucleosides"

Mitsuya, H.; Jarrett, R.F.; Matsukura, M.; Di Marzo Veronese, F.; DeVico, A.L.; Sarngadharan, M.G.; Johns, D.G.; Reitz, M.S.; Broder, S., *Proc. Natl. Acad. Sci. USA*, **84**, 2033 - 2037 (1987): "Long-term Inhibition of Human T-Lymphotropic Virus Type III/Lymphadenopathy-associated Virus (Human Immunodeficiency Virus) DNA Synthesis and RNA Expression in T Cells Protected by 2',3'-dideoxynucleosides *in vitro*"