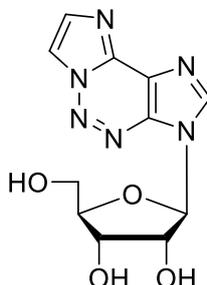


Technical Information about 2-Aza-1,N⁶-ethenoadenosine

Fluorescent analogue of adenosine

Update: September 14, 2018 HU



Abbreviation:

2-Aza-ε-Ado

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₁ H ₁₂ N ₆ O ₄	[50663-82-6]	292.3	λ _{max} 290 nm / ε 5000 / pH 7	A 086

Name: 2- Aza- 1, N⁶- ethenoadenosine

Description: 2-Aza-ε-Ado is an analogue of adenosine in which both the N¹ and the N⁶ nitrogen atoms in the adenine nucleobase are connected by an etheno bridge forming a tricyclic ring system. In addition, the ring carbon atom C² has been replaced by nitrogen.

Properties: 2-Aza-ε-Ado is a fluorescent analogue of adenosine with λ_{exc} 358 nm and λ_{em} 494 nm at pH 5.

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 weight or by UV at λ_{max}.

Purity: Typical analysis is better than 95% (HPLC / UV / 290 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 2-Aza-ε-Ado has limited solubility in water or buffer but should be better soluble in organic solvents such as DMSO. 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: If protected from light 2-Aza-ε-Ado is chemically rather stable. 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 Reference for 2-Aza-ε-Ado:

Tsou, K.C.; Yip, K.F.; Miller, E.E.; Lo, K.W., *Nucl. Acids Res.*, **1**, 531 - 547 (1974): "Synthesis of 1,N⁶-etheno-2-aza-adenosine (2-aza-epsilon-adenosine): a New Cytotoxic Fluorescent Nucleoside"