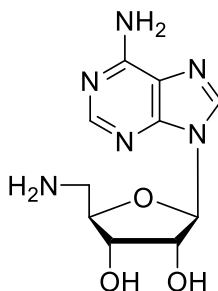


Technical Information about 5'-Amino-5'-deoxyadenosine

Update: September 14, 2018 HJ



Abbreviation: 5'-NH₂-Ado

| Formula | CAS No. | Molecular Weight | UV | BIOLOG Cat. No. |
|---|--------------|--------------------------|--|-----------------|
| C ₁₀ H ₁₄ N ₆ O ₃ | [14365-44-7] | 266.3 (for free base) | λ _{max} 259 nm / ε 15000 / pH 7 | A 021 |

Name: 5'-Amino-5'-deoxyadenosine

Description: 5'-NH₂-Ado is an analogue of adenosine where the 5'-hydroxy group has been replaced by an amino group.

Properties: Inhibitor of adenosine kinase and starting structure for coupling chemistry to the 5'-position of adenosine.

Specification: Crystallized or lyophilized chloride form. Other salt forms of 5'-NH₂-Ado may be available upon request. Equal concentrations of 5'-NH₂-Ado can appear very 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. Micro molar quantities are determined by UV at λ_{max}.

Purity: Typical analysis is better than 95% (HPLC / UV / 259 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: Due to its polar amino group, 5'-NH₂-Ado has sufficient solubility in water and aqueous buffers. 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: 5'-NH₂-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 5'-NH₂-Ado:

Langer, T.; Vogtherr, M.; Elshorst, B.; Betz, M.; Schieborr, U.; Saxena, K.; Schwalbe, H., *Chem. Bio. Chem.*, **5**, 1508 - 1516 (2004): "NMR Backbone Assignment of a Protein Kinase Catalytic Domain by a Combination of Several Approaches to the Catalytic Subunit of cAMP-dependent Protein Kinase"

Barankiewicz, J., 5. Intl. Symp. Adenosine Adenine Nucleot., 1994, Abstr. # 1044