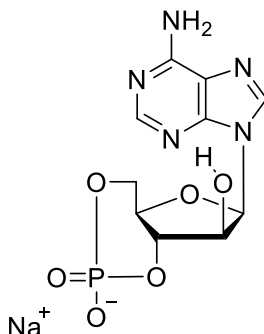


Technical Information about ara-cAMP

Update: September 06, 2022 AI



Abbreviation: ara-cAMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat.No.
C ₁₀ H ₁₁ N ₅ O ₆ P·Na	[51867-88-0]	351.2	λ _{max} 259 nm / ε 15000 / pH 7	A 076

Name: Arabinoadenosine-3', 5'-cyclic monophosphate, sodium salt

Description: ara-cAMP is an analogue of the second messenger cyclic AMP (cAMP, Cat. No. A 001) with an inverted configuration at the 2'-hydroxy group.

Properties: ara-cAMP can be useful for receptor mapping studies and negative controls.

Specification: Lyophilized or crystallized sodium salt. The free acid or other salt forms are available upon request. Equal concentrations of ara-cAMP 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. Micromolar 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.

Solubility: ara-cAMP is soluble in water (≥ 10 mM, limits have not been determined). 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: ara-cAMP 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 cyclic AMP has multiple tasks in every organism it is possible that cAMP 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 ara-cAMP:

Jäger, R.; Russwurm, C.; Schwede, F.; Genieser, H.-G.; Koesling, D.; Russwurm, M., *J. Biol. Chem.*, **287**, 1210 - 1219 (2012): "Activation of PDE10 and PDE11 Phosphodiesterases"

Miller J. P., *Adv. Cyclic Nucleotide Res.*, **14**, 335 - 344 (1981): "Cyclic AMP Derivatives as Tools for Mapping Cyclic AMP Binding Sites of Cyclic AMP-dependent Protein Kinases I and II"