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Technical Information about 8-(2-Aminoethylthio)-2'-O-methyl-cAMP

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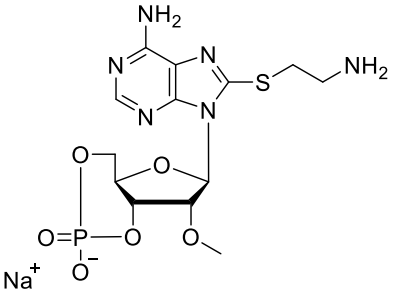

Abbreviation: **8-AET-2'-O-Me-cAMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{13}H_{18}N_6O_6PS{\cdot}Na$	[634207-89-9]	440.4	λ_{max} 279 nm / ε 17000 / pH 7	A 142

Name: 8- (2- Aminoethylthio)- 2'- O- methyladenosine- 3', 5'- cyclic monophosphate

Description: 8-AET-2'-O-Me-cAMP is an analogue of the natural signal molecule cyclic AMP (cAMP) where the hydrogen in position 8 of the nucleobase is replaced by an aminoethylthio group. In addition, the ribose 2'-hydroxy group has been methylated.

Properties: 8-AET-2'-O-Me-cAMP has only poor affinity towards protein kinases A and G and thus can be used as a ligand in affinity chromatography of cAMP binding proteins that do not require an intact 2'-OH group, such as the exchange protein activated by cyclic AMP (Epac) and certain phosphodiesterases. It is also suitable for modification with fluorophores or other markers.

Specification: Crystallized or lyophilized sodium salt. 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 / 279 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-AET-2'-O-Me-cAMP is soluble in water (≥ 16 mM). 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-AET-2'-O-Me-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 Reference for 8-AET-2'-O-Me-cAMP: 8-AET-2'-O-Me-cAMP has been synthesized by BIOLOG LSI for the first time and there are no references available at the moment.

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