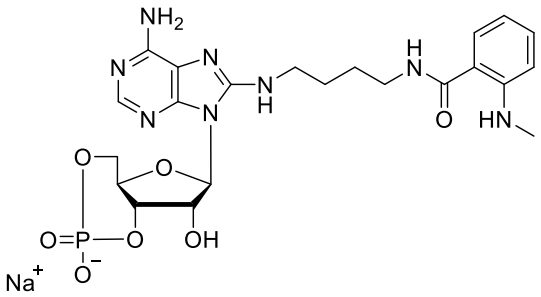
BIOLOG - LIFE SCIENCE INSTITUTE -

Technical Information about 6-MAH-cAMP

Fluorescent cyclic AMP analogue

Update: July 06, 2018 HJ



Abbreviation: **6-MAH-cAMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{24}H_{31}N_7O_7P{\cdot}Na$	[723313-27-7]	583.2	λ_{max} 261 nm / pH 7	M 017

Name: N^6- (6- [N'- Methylanthraniloyl] aminohexyl) adenosine- 3', 5'- cyclic monophosphate (6-MAH-cAMP)

Description: 6-MAH-cAMP is an analogue of the parent second messenger cyclic AMP where one of two hydrogens of the amino group in position 6 of the adenine nucleobase is replaced by an aminohexyl spacer connected to the fluorescent methylanthraniloyl group.

Properties: Fluorescent analogue of cyclic AMP (λ_{exc} 333 nm; λ_{em} 437 nm).

Specification: Crystallized or lyophilized sodium salt. Other salt forms of 6-MAH-cAMP are available upon request. Equal concentrations of 6-MAH-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.

Purity: Typical analysis is better than 98% (HPLC / UV / 261 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 6-MAH-cAMP has excellent solubility in water or buffers. When opening the tube please make sure that no substance is lost within the cap. Please rinse tube walls carefully and preferably use ultrasonic or vortex to achieve total and uniform mixing.

Stability and Storage: 6-MAH-cAMP has sufficient stability at room temperature and does not need special care during handling or shipment. Nevertheless, the compound and its solutions should be protected from bright light, stored in the freezer and should be lyophilized and frozen for longer storage periods.

Toxicity and Safety: Since cyclic AMP has multiple tasks in every organism, it is possible that cAMP analogues could 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 compounds 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 6-MAH-cAMP:
For a detailed list please inquire.

Moll, D.; Prinz, A.; Gesellchen, F.; Drewianka, S.; Zimmermann, B.; Herberg, F.W., *J. Neural. Transm*., **113**, 1015 – 1032 (2006): „Biomolecular Interaction Analysis in Functional Proteomics“

BIOLOG Life Science Institute, Bremen, Germany Phone: 49 (0) 421 591355 Fax: 49 (0) 421 5979713 e-mail: service@biolog.de

Kraemer, A.; Rehmann, H.; Cool, R.H.; Theiss, C.; de Rooij, J.; Bos, J.L.; Wittinghofer, A., *J. Mol. Biol*., **306**, 1167 - 1177 (2001): "Dynamic Interaction of cAMP with the Rap Guanine-nucleotide Exchange Factor Epac1"

Theyssen, H.; Schuster, H.P.; Packschies, L.; Bukau, B.; Reinstein, J. *J. Mol. Biol*., **263**, 657 – 670 (1996): „The Second Step of ATP Binding to DnaK Induces Peptide Release"

BIOLOG Life Science Institute, Bremen, Germany Phone: 49 (0) 421 591355 Fax: 49 (0) 421 5979713 e-mail: service@biolog.de