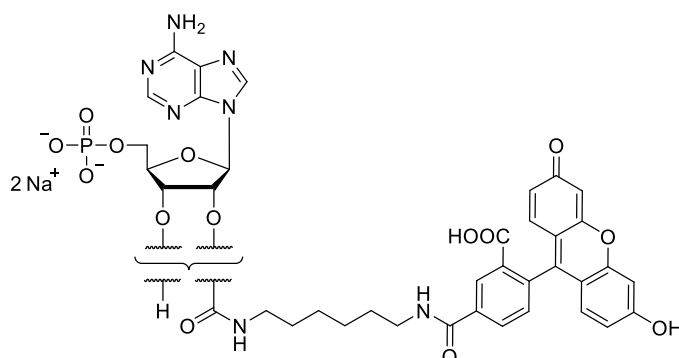


Technical Information about 2'-/3'-Fluo-AHC-5'-AMP

Update: November 08, 2018 HJ



Abbreviation: 2'-/3'-Fluo-AHC-5'-AMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₃₈ H ₃₈ N ₇ O ₁₄ P (free acid)	[pending]	847.7 (free acid)	λ_{\max} ~494 nm / ϵ ~79000 / pH 9	F 010

Name: 2'- / 3'- O- (6- [Fluoresceinyl]aminohexylcarbamoyl)adenosine- 5'- O- monophosphate
syn.: FAM-AMP, FAM-5'-AMP, AMP-Fluorescein conjugate

Description: 2'-/3'-Fluo-AHC-5'-AMP is an analogue of 5'-AMP in which 5-carboxyfluorescein has been attached either to the ribose 2'-hydroxy group or to the 3'-hydroxy group via an aminohexylcarbamoyl spacer.

Properties: 2'-/3'-Fluo-AHC-5'-AMP is a fluorescent analogue of 5'-AMP (λ_{exc} 494 nm, λ_{em} 517 nm) and can be used as a calibrator in phosphodiesterase (PDE) assays using 2'-Fluo-AHC-cAMP (FAM-cAMP, Cat. No. F 003) as a substrate.

Specification: Lyophilized or crystallized sodium salt. Other salt forms are available upon request. Equal concentrations of 2'-/3'-Fluo-AHC-5'-AMP 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/VIS at λ_{\max} .

Purity: Typical analysis is better than 95% (HPLC / UV 258 nm / VIS 478 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 2'-/3'-Fluo-AHC-5'-AMP is soluble to at least 4 mM in water. 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: 2'-/3'-Fluo-AHC-5'-AMP is chemically relatively stable. Nevertheless, the compound should be protected from light and stored in the freezer (-20° Celsius necessary, -80° recommended), for longer storage periods preferably in freeze-dried form.

Toxicity and Safety: Since nucleoside monophosphates have multiple tasks in every organism, it is very likely that 5'-AMP 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:

Schafer, P.H.; Parton, A.; Gandhi, A.K.; Capone, L.; Adams, M.; Wu, L.; Bartlett, J.B.; Loveland, M.A.; Gilhar, A.; Cheung, Y.-F.; Baillie, G.S.; Houslay, M.D.; Man, H.-W.; Muller, G.W.; Stirling, D.I., *Br. J. Pharmacol.*, **159**, 842 - 855 (2010): "Apremilast, a cAMP Phosphodiesterase-4 Inhibitor, Demonstrates Anti-inflammatory Activity in vitro and in a Model of Psoriasis"