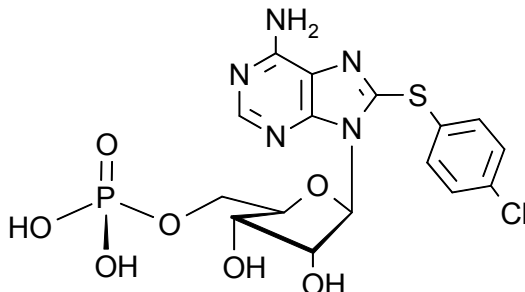


Technical Information about 8-pCPT-5'-AMP

Update: October 25, 2012 MP



Abbreviation: 8-pCPT-5'-AMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₆ H ₁₇ ClN ₅ O ₇ PS (free acid)	[78710-84-6]	489.8 (free acid)	λ _{max} 282 nm / ε 16000 / pH 7	C 101

Name: 8- (4- Chlorophenylthio)adenosine- 5'- O- monophosphate

Description: 8-pCPT-5'-AMP is an analogue of adenosine-5'-O-monophosphate (5'-AMP) in which the hydrogen in position 8 of the heterocyclic nucleobase is replaced by the lipophilic 4-chlorophenylthio moiety.

Properties: 8-pCPT-5'-AMP is a potential metabolite of 8-CPT-cAMP/8-pCPT-cAMP (Cat. No. C 010), released by action of phosphodiesterases. 8-CPT-cAMP is a lipophilic activator of both PKA and PKG and of Epac.

Specification: Crystallized or lyophilized sodium salt. The free acid or other salt forms are available upon request. 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 97% (HPLC / UV / 282 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-pCPT-5'-AMP is soluble in water (≥ 12 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-pCPT-5'-AMP is chemically rather stable. Nevertheless, we recommend that the compound should be stored in the freezer, for longer storage periods preferably in freeze-dried form. Since UV radiation develops a fluorescent impurity, which can disturb in fluorescence assays, avoid bright light during handling and experiments.

Toxicity and Safety: Since AMP has multiple tasks in every organism it is very likely that lipophilic 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 for 8-pCPT-5'-AMP:

Skibo, E.B.; Meyer, R.B.Jr., *J. Med. Chem.*, **24**, 1155 - 1161 (1981): "Inhibition of Inosinic Acid Dehydrogenase by 8-Substituted Purine Nucleotides"