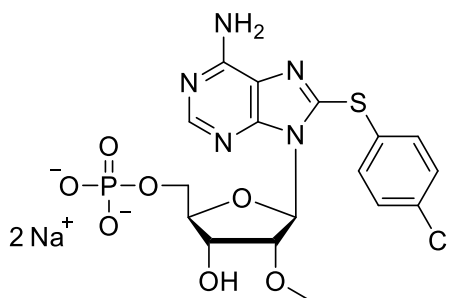


## Technical Information about 8-(4-Chlorophenylthio)-2'-O-methyladenosine-5'-O-monophosphate

Potential metabolite of the specific Epac activator 8-pCPT-2'-O-Me-cAMP

Update: October 12, 2018 HJ



**Abbreviation:** 8-pCPT-2'-O-Me-5'-AMP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>17</sub> H <sub>19</sub> ClN <sub>5</sub> O <sub>7</sub> PS	[1187179-94-7]	503.9 (free acid)	$\lambda_{\max}$ 282 nm / $\epsilon$ 16000 / pH 7	C 078

**Name:** *para*-Chlorophenylthio-2'-O-methyladenosine- 5'-O-monophosphate or 8-(4-chlorophenylthio)-2'-O-methyladenosine- 5'-O-monophosphate

**Description:** 8-pCPT-2'-O-Me-5'-AMP is an analogue of adenosine- 5'- O- monophosphate (5'-AMP), where the hydrogen in position 8 of the adenine nucleobase has been replaced by the lipophilic 4-chlorophenylthio moiety. In addition, the ribose 2'- hydroxy group has been methylated.

**Properties:** 8-pCPT-2'-O-Me-5'-AMP is a potential metabolite of the specific Epac activator 8-pCPT-2'-O-Me-cAMP (Cat. No. C 041), released by action of phosphodiesterases.

**Specification:** Lyophilized or crystallized sodium salt. The free acid or other salts of 8-pCPT-2'-O-Me-5'-AMP are available upon request. **Equal concentrations of 8-pCPT-2'-O-Me-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 at  $\lambda_{\max}$ .

**Purity:** Typical analysis is better than 97% (HPLC / UV / 282 nm). The product is not sterile and has not been tested for endotoxins.

**Stability and Storage:** 8-pCPT-2'-O-Me-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.

**Solubility:** 8-pCPT-2'-O-Me-5'-AMP has excellent solubility in water or buffer systems. 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.

**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!**

**Reference for 8-pCPT-2'-O-Me-5'-AMP:**

Laxman, S.; Riechers, A.; Sadilek, M.; Schwede, F.; Beavo, J.A., *PNAS*, **103**, 19194 - 19199 (2006): "Hydrolysis Products of cAMP Analogs Cause Transformation of Trypanosoma Brucei from Slender to Stumpy-like Forms"