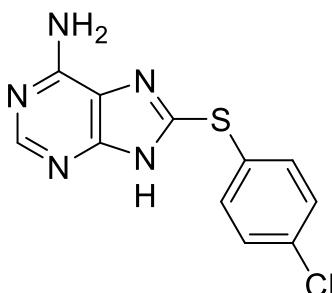


Technical Information about 8-pCPT-Ade

Update: September 10, 2018 HJ



Abbreviation: 8-pCPT-Ade

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C ₁₁ H ₈ ClN ₅ S	[696574-61-5]	277.7	λ_{\max} 285 nm / ϵ 16000 / pH 7	C 069

Name: 8- (4- Chlorophenylthio)adenine

Description: 8-pCPT-Ade is an analogue of adenine in which the hydrogen in position 8 of the heterocyclic nucleobase is replaced by a lipophilic 4-chlorophenylthio moiety.

Properties: 8-pCPT-Ade is a potential metabolite of the specific Epac activator 8-pCPT-2'-O-Me-cAMP (Cat. No. C 041). The corresponding nucleoside 8-pCPT-2'-O-Me-Ado (Cat. No. C 070) and the 5'-O-monophosphate 8-pCPT-2'-O-Me-5'-AMP (Cat. No. C 078) are available as well.

Specification: Crystallized or lyophilized solid. 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 95% (HPLC / UV / 285 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-pCPT-Ade is soluble in DMSO or DMF. 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-Ade has sufficient stability for short term exposure to ambient 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 adenine has multiple tasks in every organism, it is very likely that its 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-Ade:

For information on metabolites of the specific Epac activator 8-pCPT-2'-O-Me-cAMP please compare:

Enyeart, J.A.; Liu, H.; Enyeart, J.J., *Am. J. Physiol. Endocrinol. Metab.*, **301**, 941 - 954 (2011): "8-Phenylthio-adenines Stimulate the Expression of Steroid Hydroxylases, Cav3.2 Ca²⁺ Channels, and Cortisol Synthesis by a cAMP-independent Mechanism"

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