

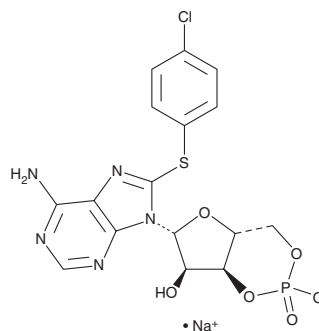
PRODUCT INFORMATION



8-CPT-Cyclic AMP (sodium salt)

Item No. 12011

CAS Registry No.:	93882-12-3
Formal Name:	8-[(4-chlorophenyl)thio]-cyclic 3',5'-(hydrogen phosphate)-adenosine, monosodium salt
Synonyms:	8-(p-Chlorophenylthio)-cAMP, 8-CPT-cAMP
MF:	C ₁₆ H ₁₄ ClN ₅ O ₆ PS • Na
FW:	493.8
Purity:	≥98%
UV/Vis.:	λ _{max} : 221, 282 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

8-CPT-Cyclic AMP (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the 8-CPT-cyclic AMP (sodium salt) in water. The solubility of 8-CPT-cyclic AMP (sodium salt) in water is approximately 25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

8-CPT-Cyclic AMP is a lipophilic activator of the cyclic-AMP- and cyclic-GMP-dependent protein kinases, PKA and PKG ($K_a = 0.05$ and $0.11 \mu\text{M}$, respectively).¹ 8-CPT-cAMP inhibits cyclic GMP-specific phosphodiesterase (PDE VA), cyclic GMP-inhibited phosphodiesterase (PDE III), and cyclic AMP-specific phosphodiesterase (PDE IV) with IC_{50} values of 0.9, 24, and $25 \mu\text{M}$, respectively.² It has been used in studies to analyze the signal transduction pathways initiated by cyclic-AMP- and cyclic-GMP-dependent protein kinases.

References

1. Sandberg, M., Butt, E., Nolte, C., *et al.* Characterization of Sp-5,6-dichloro-1-β-D-ribofuranosylbenzimidazole-3',5'-monophosphorothioate (Sp-5,6-DCI-cBiMPS) as a potent and specific activator of cyclic-AMP-dependent protein kinase in cell extracts and intact cells. *Biochem. J.* **279**(Pt 2), 521-527 (1991).
2. Connolly, B.J., Willits, P.B., Warrington, B.H., *et al.* 8-(4-chlorophenyl)thio-cyclic AMP is a potent inhibitor of the cyclic GMP-specific phosphodiesterase (PDE VA). *Biochem. Pharmacol.* **44**(12), 2303-2306 (1992).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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