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ProductInformation

Sp-8-pCPT-cAMPS

Product Number **C 8990** Store at –70 °C

CAS RN: 129693-13-6 (Free acid)

Synonym: 8-(4-Chlorophenylthio)adenosine-3',5'-cyclic monophosphorothioate, Sp-isomer, sodium salt

Molecular Formula: C₁₆H₁₄ClN₅O₅PS₂Na

Molecular Weight: 509.86

Product Description

Sp-8-pCPT-cAMPS is a lipophilic, site-selective activator of protein kinase A (cyclic AMP agonist). It is resistant against mammalian cyclic nucleotide-dependent phosphodiesterases and does not exhibit any metabolic side effects. It is highly membrane permeant.

Sp-8-pCPT-cAMPS is selective for the B site of cAK II (cAMP-dependent protein kinase).¹

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Soluble in water at ~1 mM. Also soluble in DMSO and ethanol.

Storage/Stability

Store at -70 °C.

References

- Dostmann, W.R.G., et al., Probing the Cyclic Nucleotide Binding Sites of cAMP-Dependent Protein Kinase I and II with Analogs of Adenosine 3', 5'-Cyclic Phosphorothioates., J. Biol. Chem., 265, 10484 - 10491 (1990).
- Christensen, A.E., et al. cAMP analog mapping of Epac1 and cAMP kinase. Discriminating analogs demonstrate that Epac and cAMP kinase act synergistically to promote PC-12 cell neurite extension. J. Biol. Chem., 278, 35394-35402 (2003).
- 3. Huang, C.C., et al., Activation of cAMP-dependent Protein Kinase Suppresses the Presynaptic Cannabinoid Inhibition of Glutamatergic Transmission at Corticostriatal Synapses. Mol. Pharmacol., **61**, 578 585 (2002):

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