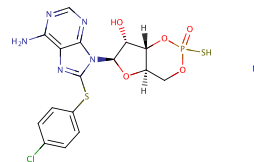


Rp-8-CPT-cAMPS sodium

Chemical Properties

CAS No. :	221905-35-7
Formula:	C ₁₆ H ₁₄ ClN ₅ NaO ₅ PS ₂
Molecular Weight:	509.86
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Rp-8-CPT-cAMP is a structural combination of the lipophilic and non-hydrolyzable cAMP analogs, 8-CPT-cyclic AMP and Rp-cyclic AMPS. [1] It functions as a site-selective inhibitor of protein kinase A (PKA) type I and II, with preference towards site A of type I and site B of type II. By occupying cAMP binding sites at the regulatory subunit of PKA, Rp-8-CPT-cAMP prevents the kinase holoenzyme from dissociative activation. [2],[3]
Targets(IC50)	Others, PKA

Solubility Information

Solubility	DMSO: 25 mg/mL (49.03 mM), Sonication is recommended. DMF: 30 mg/mL (58.84 mM), Sonication is recommended. Ethanol: 0.5 mg/mL (0.98 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9613 mL	9.8066 mL	19.6132 mL
5 mM	0.3923 mL	1.9613 mL	3.9226 mL
10 mM	0.1961 mL	0.9807 mL	1.9613 mL
50 mM	0.0392 mL	0.1961 mL	0.3923 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Schwede, F., Maronde, F., Genieser, H., et al. Cyclic nucleotide analogs as biochemical tools and prospective drugs. *Pharmacology & Therapeutics* 87(2), 199-226 (2000).

Dostmann, W.R., Taylor, S.S., Genieser, H.G., et al. Probing the cyclic nucleotide binding sites of cAMP-dependent protein kinases I and II with analogs of adenosine 3',5'-cyclic phosphorothioates. *J. Biol. Chem.* 265(18), 10484-10491 (1990).

Gjertsen, B.T., Mellgran, G., Otten, A., et al. Novel (Rp)-cAMPS analogs as tools for inhibition of cAMP-kinase in cell culture. Basal cAMP-kinase activity modulates interleukin-1 β action. *J. Biol. Chem.* 270(35), 20599-20607 (1995).

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