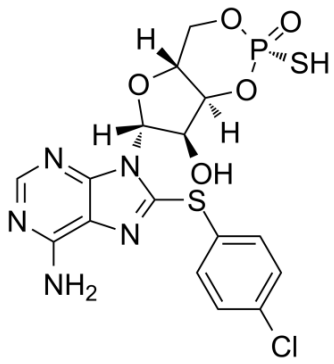
Sp-8-CPT-cAMPS

Cat. No.:	HY-120994B
CAS No.:	129693-13-6
Molecular Formula:	$C_{16}H_{15}ClN_5O_5PS_2$
Molecular Weight:	487.88
Target:	PKA
Pathway:	Protein Tyrosine Kinase/RTK; Stem Cell/Wnt
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Sp-8-CPT-cAMPS, a cAMP analog, is a potent and selective activator of the cAMP-dependent **protein kinas A (PKA I and PKA II)**. Sp-8-CPT-cAMPS selects site A of RI compares to site A of RII by 153-fold and site B of RII compares to site B of RI by 59-fold[1][2].
IC_{50} & Target	PKA[1]
In Vitro	Sp-8-CPT-cAMPS (100 μM; 24 h) enhances the IL-1β-stimulated nitrite release, and increases the release ofnitrite by vascular smooth muscle cells by 3 fold in the absence of IL-1β in vascular smooth muscle cells[2]. Sp-8-CPT-cAMPS (100 μM; 24 h) increases IL-1β-induced expression of iNOS protein in rat aortic smooth muscle cells [2]. Sp-8-CPT-cAMPS (10 μM; 30 min) exhibits anti-spasmogenic activity on ACh-induced tension development in guinea-pig trachealis[3].

REFERENCES

[1]. Dostmann WR , 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. 1990 Jun 25;265(18):10484-91.

[2]. Boese M, et, al. Effect of cyclic GMP-dependent vasodilators on the expression of inducible nitric oxide synthase in vascular smooth muscle cells: role of cyclic AMP. Br J Pharmacol. 1996 Oct;119(4):707-15.

[3]. Spicuzza L, et, al. Evidence that the anti-spasmogenic effect of the beta-adrenoceptor agonist, isoprenaline, on guinea-pig trachealis is not mediated by cyclic AMP-dependent protein kinase. Br J Pharmacol. 2001 Aug;133(8):1201-12.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA