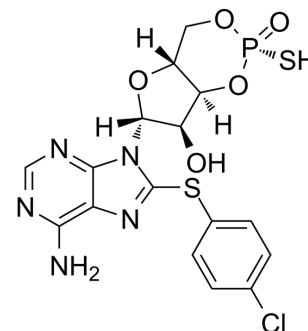


Sp-8-CPT-cAMPS

Cat. No.:	HY-120994B
CAS No.:	129693-13-6
Molecular Formula:	C ₁₆ H ₁₅ ClN ₅ O ₅ PS 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 Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sp-8-CPT-cAMPS, a cAMP analog, is a potent and selective activator of the cAMP-dependent protein kinase 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]} .
IC₅₀ & Target	PKA ^[1]
In Vitro	<p>Sp-8-CPT-cAMPS (100 μM; 24 h) enhances the IL-1β-stimulated nitrite release, and increases the release of nitrite by vascular smooth muscle cells by 3 fold in the absence of IL-1β in vascular smooth muscle cells^[2].</p> <p>Sp-8-CPT-cAMPS (100 μM; 24 h) increases IL-1β-induced expression of iNOS protein in rat aortic smooth muscle cells^[2].</p> <p>Sp-8-CPT-cAMPS (10 μM; 30 min) exhibits anti-spasmogenic activity on ACh-induced tension development in guinea-pig trachealis^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

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.

Caution: Product has not been fully validated for medical applications. For research use only.

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