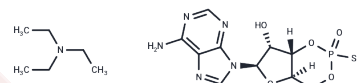


## Rp-cAMPS triethylammonium salt

## Chemical Properties

CAS No. :	151837-09-1
Formula:	C16H27N6O5PS
Molecular Weight:	446.46
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Rp-cAMPS triethylammonium salt is a competitive inhibitor of cAMP-dependent protein kinases I and II, inhibiting cAMP-induced conformational changes to block PKA activation.
Targets(IC50)	PKA
In vitro	Rp-cAMPS triethylammonium salt inhibits CAMP-induced CAMP-dependent protein kinase I and II activation with $K_i$ values of 12.5 $\mu\text{M}$ and 4.5 $\mu\text{M}$ . Rp-cAMPS triethylammonium salt (100 $\mu\text{M}$ ) reduced $\text{K}^+$ current induced by calcitonin gene-related peptide (CGRP) in porcine smooth muscle cells. [2]
In vivo	Rp-cAMPS triethylammonium salt (10 $\mu\text{M}$ , 15 min) reduced monosynaptic EPSCs of PB-CeLC and BLA-CeLC synapses in arthritic rats, but had no effect on control neurons in normal animals. [1] Intrabla infusion of Rp-cAMPS triethylammonium salt after cocaine memory reconsolidation impaired subsequent cocaine-seeking behavior in a dose-dependent, site-specific, and memory-reactivation dependent manner. [3]

## Solubility Information

Solubility	DMSO: 8 mg/mL (17.92 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	2.2398 mL	11.1992 mL	22.3984 mL
5 mM	0.448 mL	2.2398 mL	4.4797 mL
10 mM	0.224 mL	1.1199 mL	2.2398 mL
50 mM	0.0448 mL	0.224 mL	0.448 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

Rothermel JD, et al. A mechanistic and kinetic analysis of the interactions of the diastereoisomers of adenosine 3', 5'-(cyclic)phosphorothioate with purified cyclic AMP-dependent protein kinase. *Biochem J.* 1988 May 1;251(3):757-62.

Wellman GC, et al. ATP-sensitive K<sup>+</sup> channel activation by calcitonin gene-related peptide and protein kinase A in pig coronary arterial smooth muscle. *J Physiol.* 1998 Feb 15;507 ( Pt 1)(Pt 1):117-29.

Arguello AA, et al. Involvement of amygdalar protein kinase A, but not calcium/calmodulin-dependent protein kinase II, in the reconsolidation of cocaine-related contextual memories in rats. *Psychopharmacology (Berl).* 2014 Jan;231(1):55-65.

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