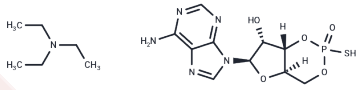
# Data Sheet (Cat.No.T12764)

TargetMol

## Rp-cAMPS triethylammonium salt

### Chemical Properties



CAS No. : 151837-09-1

Formula: C16H27N6O5PS

Molecular Weight: 446.46

Appearance: no data available

Storage: store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

### 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 Ki values of 12.5 μM and 4.5 μM.<br>Rp-cAMPS triethylammonium salt (100 μM) reduced K+ current induced by calcitonin gene-related peptide (CGRP) in porcine smooth muscle cells. [2] |
| In vivo | Rp-cAMPS triethylammonium salt (10 μM, 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]<br>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.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

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.

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+ 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.