

# Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** cAMPS-Sp, triethylammonium salt

**Catalog No.:** 1333

**Batch No.:** 5

**CAS Number:** 93602-66-5

**IUPAC Name:** (S)-Adenosine, cyclic 3',5'-(hydrogenphosphorothioate) triethylammonium

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>12</sub>N<sub>5</sub>O<sub>5</sub>PS.C<sub>6</sub>H<sub>15</sub>N

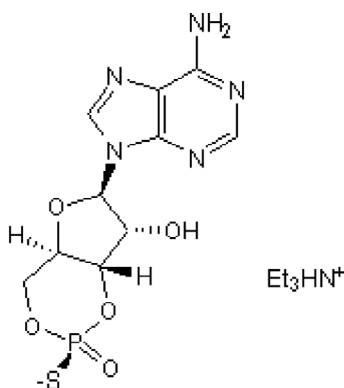
**Batch Molecular Weight:** 446.46

**Physical Appearance:** White lyophilised solid

**Solubility:** water to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows >99.8% purity

**Mass Spectrum:** Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

**Product Name:** cAMPS-Sp, triethylammonium salt

**Catalog No.:** 1333

**Batch No.:** 5

**CAS Number:** 93602-66-5

**IUPAC Name:** (S)-Adenosine, cyclic 3',5'-(hydrogenphosphorothioate) triethylammonium

**Description:**

cAMPS-Sp, triethylammonium salt is a cell-permeable cAMP analog that activates cAMP receptor proteins such as PKA and cAMP-regulated guanine nucleotide exchange factor. R-enantiomer also available.

**Physical and Chemical Properties:**

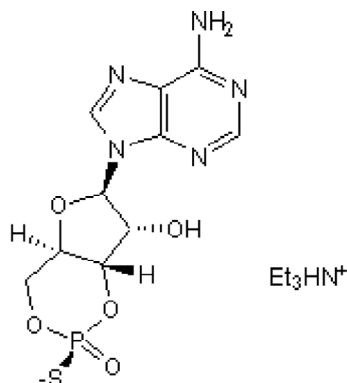
Batch Molecular Formula: C<sub>10</sub>H<sub>12</sub>N<sub>5</sub>O<sub>5</sub>PS.C<sub>6</sub>H<sub>15</sub>N

Batch Molecular Weight: 446.46

Physical Appearance: White lyophilised solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

water to 100 mM

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**Other Information:**

This product is supplied as a lyophilised solid and may be very hard to visualise. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**References:**

**Lin *et al*** (2006) Ethanol inhibition of NMDA-induced responses and acute tolerance to the inhibition in rat rostral ventrolateral medulla in vivo: Involvement of cAMP-dependent protein kinases. *Neuropharmacology* **51** 747. PMID: 16806304.

**Kawasaki *et al*** (1998) A family of cAMP-binding proteins that directly activate Rap1. *Science* **282** 2275. PMID: 9856955.

**Dostmann *et al*** (1990) 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** 10484. PMID: 2162349.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956