

**Product Name:** 2'-MeCCPA

**Catalog No.:** 2281

**Batch No.:** 1

CAS Number: 205171-12-6

IUPAC Name: 2-Chloro-*N*-cyclopentyl-2'-methyladenosine

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>16</sub>H<sub>22</sub>ClN<sub>5</sub>O<sub>4</sub>·¼H<sub>2</sub>O

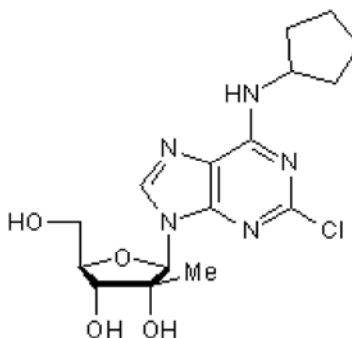
**Batch Molecular Weight:** 388.33

**Physical Appearance:** White solid

**Solubility:** DMSO to 25 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.35 (Chloroform:Methanol [95:5])

**Melting Point:** Between 129 - 133°C

**HPLC:** Shows 98.7% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

|             | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 49.49  | 5.84     | 18.03    |
| Found       | 49.43  | 5.81     | 17.9     |

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

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**Description:**

Potent and highly selective agonist at A<sub>1</sub> adenosine receptors (K<sub>i</sub> values are 3.3, 9580, 37600 and 1150 nM for human recombinant A<sub>1</sub>, A<sub>2A</sub>, A<sub>2B</sub> and A<sub>3</sub> receptors respectively). Acts as a full agonist; inhibits forskolin-stimulated adenylyl cyclase activity in rat cortical membranes with an IC<sub>50</sub> value of 13.1 nM.

**Physical and Chemical Properties:**

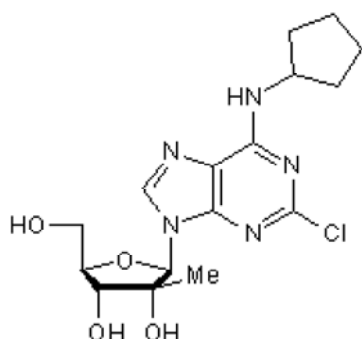
Batch Molecular Formula: C<sub>16</sub>H<sub>22</sub>ClN<sub>5</sub>O<sub>4</sub>·½H<sub>2</sub>O

Batch Molecular Weight: 388.33

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 25 mM

**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. Our standard recommendations are:

**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.

**References:**

**Cappellacci et al** (2005) Synthesis, biological evaluation, and molecular modeling of ribose-modified adenosine analogues as adenosine receptor agonists. *J.Med.Chem.* **48** 1550. PMID: 15743197.

**Franchetti et al** (1998) 2'-C-Methyl analogues of selective adenosine receptor agonists: synthesis and binding studies. *J.Med.Chem.* **41** 1708. PMID: 9572897.

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