

# **Certificate of Analysis**

Print Date: Jan 15th 2016

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Product Name: 2-Chloroadenosine Catalog No.: 3136 Batch No.: 1

CAS Number: 146-77-0 EC Number: 205-678-3

IUPAC Name: 6-Amino-2-chloropurine riboside

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{10}H_{12}CIN_5O_4$ 

Batch Molecular Weight: 301.69
Physical Appearance: White solid

**Solubility:** water to 25 mM

DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

#### 2. ANALYTICAL DATA

**HPLC:** Shows 98.4% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 39.81 4.01 23.2 Found 39.91 4.03 23.24



# **Product Information**

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**IUPAC Name:** 6-Amino-2-chloropurine riboside

# **Description:**

Metabolically stable analog of adenosine that behaves as an adenosine receptor agonist (Ki values are 300, 80 and 1900 nM for A<sub>1</sub>, A<sub>2A</sub> and A<sub>3</sub> receptors respectively). Anticonvulsive in vivo.

# **Physical and Chemical Properties:**

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Batch Molecular Weight: 301.69 Physical Appearance: White solid

# Minimum Purity: >98%

### **Batch Molecular Structure:**

Storage: Store at +4°C

### Solubility & Usage Info:

water to 25 mM DMSO to 100 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:

Mathot et al (1996) Pharmacokinetic-haemodynamic relationships of 2-chloroadenosine at adenosine A<sub>1</sub> and A<sub>2a</sub> receptors in vivo. Br.J.Pharmacol. 118 369. PMID: 8735640.

Pourgholami et al (1997) Intra-amygdala infusion of 2-chloroadenosine suppresses amygdala-kindled seizures. Brain Res. 775 37. PMID: 9439826.

Abdul-Ghani et al (1997) The protective effect of 2-chloroadenosine against the development of amygdala kindling and on amygdalakindled seizures. Eur. J. Pharmacol. 326 7. PMID: 9178649.