Batch No.: 14



# **Certificate of Analysis**

www.tocris.com

Catalog No.: 1063

Product Name: CGS 21680 hydrochloride

CAS Number: 124431-80-7

IUPAC Name: 4-[2-[[6-Amino-9-(*N*-ethyl-β-D-ribofuranuronamidosyl)-9*H*-purin-2-yl]amino]ethyl]benzenepropanoic acid

hydrochloride

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{23}H_{29}N_7O_6$ .HCI

**Batch Molecular Weight:** 535.99 **Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM

2.25eq. NaOH to 100 mM

Storage: Desiccate at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

HPLC: Shows 98.3% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 51.54 5.64 18.29 Found 51.29 5.73 18.07



## **Product Information**

Print Date: Jan 27th 2014

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hydrochloride

#### **Description:**

 $A_{2A}$  adenosine receptor agonist ( $K_i$  = 27 nM). Has affinity for  $A_1$  and  $A_3$  adenosine receptors but can be used to distinguish  $A_{2A}$ - and  $A_{2B}$ -mediated effects.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C23H29N7O6.HCl

Batch Molecular Weight: 535.99 Physical Appearance: White solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Desiccate at -20°C

#### Solubility & Usage Info:

DMSO to 100 mM 2.25eq. NaOH to 100 mM

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### 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).

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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:

**Phillis** *et al* (1990) The selective adenosine A<sub>2</sub> receptor agonist, CGS 21680, is a potent depressant of cerebral cortical neuronal activity. Brain Res. *509* 328. PMID: 2322828.

**Nekooeian and Tabrizchi** (1998) Effects of CGS 21680, a selective A<sub>2A</sub> adenosine receptor agonist, on cardiac output and vascular resistance in acute heart failure in the anaesthetized rat. Br.J.Pharmacol. **123** 1666. PMID: 9605574.

Klot (2000) Adenosine receptors and their ligands. Naunyn Schmiedebergs Arch.Pharmacol. 362 382. PMID: 11111832.

