

# **Certificate of Analysis**

Print Date: Jun 9th 2022

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Product Name: BAY 60-6583 Catalog No.: 4472 Batch No.: 5

CAS Number: 910487-58-0

IUPAC Name: 2-[[6-Amino-3,5-dicyano-4-[4-(cyclopropylmethoxy)phenyl]-2-pyridinyl]thio]-acetamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{19}H_{17}N_5O_2S$ 

Batch Molecular Weight: 379.44

Physical Appearance: Beige solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

### 2. ANALYTICAL DATA

**HPLC:** Shows 99.7% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.14 4.52 18.46 Found 60.45 4.39 18.38



# **Product Information**

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#### **Description:**

BAY 60-6583 is a partial agonist at adenosine  $A_{2B}$  receptors (EC<sub>50</sub> = 2.83 nM for murine  $A_{2B}$  receptor). Displays selectivity for  $A_{2B}$  over  $A_1$ ,  $A_{2A}$  and  $A_3$  receptors. BAY 60-6583 antagonizes the effect of NECA (Cat. No. 1691) and adenosine (Cat. No. 3624) in cAMP accumulation assays. Decreases fMLP-induced superoxide production in neutrophils at low concentrations (1-10 nM). Cardioprotective; attenuates infarct size in a mouse model of myocardial ischemia. Exhibits ERK1/2-biased agonism.

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

Batch Molecular Formula: C<sub>19</sub>H<sub>17</sub>N<sub>5</sub>O<sub>2</sub>S

Batch Molecular Weight: 379.44 Physical Appearance: Beige solid

Minimum Purity: ≥98%

### **Batch Molecular Structure:**

Storage: Store at +4°C

## Solubility & Usage Info:

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:

**Gao** *et al* (2014) Probing biased/partial agonism at the G protein-coupled A<sub>2B</sub> adenosine receptor. Biochem. Pharmacol. *90* 297. PMID: 24853985.

**Hinz** *et al* (2014) BAY60-6583 acts as a partial agonist at adenosine A<sub>2B</sub> receptors. J.Pharmacol.Exp.Ther. **349** 427. PMID: 24633424. **van der Hoeven** *et al* (2011) A role for the low-affinity A2B adenosine receptor in regulating superoxide generation by murine neutrophils. J.Pharmacol.Exp.Ther. **338** 1004. PMID: 21693629.

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