



# **Certificate of Analysis**

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**Product Name: Aminopotentidine** Catalog No.: 0721 Batch No.: 3

140873-26-3 CAS Number:

**IUPAC Name:** 4-Amino-N-[2-[[(cyanoamino)[[3-[3-(1-piperidinylmethyl)phenoxy]propyl]imino]methyl]amino]ethyl]benzamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{26}H_{35}N_7O_2.1/4H_2O$ **Batch Molecular Formula:** 

**Batch Molecular Weight:** 482.1

**Physical Appearance:** Off-white solid Solubility:

DMSO to 100 mM ethanol to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

TLC:  $R_f = 0.4$  (Chloroform:Methanol [4:1])

HPLC: Shows 96.8% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 64.77 7.42 20.34 Found 64.39 7.37 19.97



## **Product Information**

Print Date: Jun 14th 2022

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IUPAC Name: 4-Amino-N-[2-[[(cyanoamino)[[3-[3-(1-piperidinylmethyl)phenoxy]propyl]imino]methyl]amino]ethyl]benzamide

## **Description:**

Aminopotentidine is a  $H_2$  antagonist ( $K_B$  values are 220 and 280 nM at human and guinea pig  $H_2$  receptors respectively) and precursor for the synthesis of the [1251]-iodo derivative.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>26</sub>H<sub>35</sub>N<sub>7</sub>O<sub>2</sub>. <sup>1</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 482.1 Physical Appearance: Off-white solid

Minimum Purity: ≥97%

### **Batch Molecular Structure:**

Storage: Store at -20°C

## Solubility & Usage Info:

DMSO to 100 mM ethanol 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:

Xie et al (2006) Synthesis and pharmacological characterization of novel fluorescent histamine H<sub>2</sub>-receptor ligands derived from aminopotentidine. Bioorg.Med.Chem.Lett. **16** 3886. PMID: 16730977.

**Hirschfield** *et al* (1992) lodoaminopotentidine and related compounds: a new class of ligands with high affinity and selectivity for the histamine H<sub>2</sub> receptor. J.Med.Chem. **35** 2231. PMID: 1613748.

**Ruat** *et al* (1990) Reversible and irreversible labeling and autoradiographic localisation of the cerebral histamine  $H_2$  receptor using [1251] iodinated probes. Proc.Natl.Acad.Sci.USA *87* 1658. PMID: 2308927.