

# **Certificate of Analysis**

Print Date: May 23rd 2022

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**Product Name:** Sonepiprazole Catalog No.: 4185 Batch No.: 1

170858-33-0 CAS Number:

**IUPAC Name:** 4-[4-[2-[(1S)-3,4-Dihydro-1*H*-2-benzopyran-1-yl)ethyl]-1-piperazinyl]-benzenesulfonamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

C21H27N3O3S.1/2H2O **Batch Molecular Formula:** 

**Batch Molecular Weight:** 410.53

Off-white solid **Physical Appearance:** DMSO to 100 mM Solubility: Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

TLC:  $R_f = 0.5$  (Chloroform:Methanol [85:15])

HPLC: Shows 97.9% purity

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

**Optical Rotation:**  $[\alpha]_D$  = -62.1 (Concentration = 0.48, Solvent = DMF)

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 61.44 6.87 10.24 Found 61.54 6.75 10.33



# **Product Information**

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# **Description:**

Sonepiprazole is a selective, high affinity antagonist for the rat and human dopamine  $D_4$  receptor ( $K_i = 10$  nM). Exhibits low affinity at other monoamine receptors ( $K_i > 2000$  nM). Induces c-fos gene expression in medial prefrontal cortex in a similar manner to clozapine (Cat. No. 0444). Brain penetrant and orally available.

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

Batch Molecular Formula: C<sub>21</sub>H<sub>27</sub>N<sub>3</sub>O<sub>3</sub>S.½H<sub>2</sub>O

Batch Molecular Weight: 410.53 Physical Appearance: Off-white 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.

# **Licensing Information:**

Sold for research purposes under agreement from Pfizer Inc.

## References:

Merchant et al (1996) Pharmacological characterization of U-101387, a DA D₄ receptor selective antagonist. J.Pharmacol.Exp.Ther. 279 1392. PMID: 8968364.

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