

Certificate of Analysis

Print Date: Feb 14th 2022

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Product Name: Risperidone Catalog No.: 2865 Batch No.: 1

CAS Number: 106266-06-2

IUPAC Name: 3-[2-[4-(6-Fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]ethyl]-6,7,8,9-tetrahydro-2-methyl-4*H*-pyrido[1,2-a]pyrimidin-4-

one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{23}H_{27}FN_4O_2.1/4H_2O$

Batch Molecular Weight: 414.98

Physical Appearance: White solid

Solubility: DMSO to 10 mM

ethanol to 10 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows >99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 66.57 6.68 13.5 Found 66.67 6.6 13.49

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Product Information

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Description:

Risperidone is an atypical antipsychotic agent that displays 5-HT_{2A} receptor antagonism. Also displays high affinity at D_2 receptors (K_i values are 0.4 and 3.13 nM for 5-HT_{2A} and D_2 receptors respectively).

Physical and Chemical Properties:

Batch Molecular Formula: C23H27FN4O2.14H2O

Batch Molecular Weight: 414.98 Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 10 mM ethanol to 10 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:

Wang et al (2018) Structure of the D₂ DA receptor bound to the atypical antipsychotic drug risperidone Nature 555 269. PMID: 29466326.

Stathis et al (1996) Risperidone: a novel antipsychotic with many "atypical" properties. Psychopharmacol. 127 181.

Leysen et al (1994) Risperidone: a novel antipsychotic with balanced serotonin-DA antagonism, receptor occupancy profile, and pharmacologic activity. J.Clin.Psychiatry **55** (Suppl.) 5. PMID: 7520908.

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