



Certificate of Analysis

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Product Name: Spiperone hydrochloride Catalog No.: 0995 Batch No.: 10

CAS Number: 2022-29-9 EC Number: 212-024-0 IUPAC Name: 8-[4-(4-Fluorophenyl)-4-oxobutyl]-1-phenyl-1,3,8-triazaspiro[4,5]decan-4-one hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₂₆FN₃O₂.HCl

Batch Molecular Weight: 431.94

Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.28$ (Chloroform:Methanol [95:5])

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.96 6.3 9.73 Found 64.08 6.44 9.6





Product Information

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IUPAC Name: 8-[4-(4-Fluorophenyl)-4-oxobutyl]-1-phenyl-1,3,8-triazaspiro[4,5]decan-4-one hydrochloride

Description:

 5-HT_{2A} serotonin and selective D_2 -like dopamine receptor antagonist (K_i values are 0.06, 0.6, 0.08, \sim 350, \sim 3500 nM for D_2 , D_3 , D_4 , D_1 and D_5 receptors respectively). Antipsychotic.

Physical and Chemical Properties:

Batch Molecular Formula: C23H26FN3O2.HCI

Batch Molecular Weight: 431.94 Physical Appearance: Off-white solid

Minimum Purity: >98% Batch Molecular Structure:

Storage: Store at RT

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:

Merck Index 12 8903.

Hoyer *et al* (1994) VII. International Union of Pharmacology classification of receptors for 5-hydroxytryptamine (serotonin). Pharmacol.Rev. *46* 157. PMID: 7938165.

Seeman and van Tol (1994) Dopamine receptor pharmacology. TiPS 15 264. PMID: 7940991.