

Certificate of Analysis

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Product Name: Haloperidol hydrochloride Catalog No.: 0931 Batch No.: 3

CAS Number: 1511-16-6 EC Number: 200-155-6 IUPAC Name: 4-[4-(4-Chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(4-fluorophenyl)-1-butanone hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₃CIFNO₂.HCI

Batch Molecular Weight: 412.33
Physical Appearance: White solid

Solubility: ethanol to 10 mM with gentle warming DMSO to 25 mM with gentle warming

Store at RT

Storage: Sto Batch Molecular Structure:

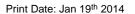
2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.17 5.87 3.4 Found 60.92 5.84 3.53





Product Information

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Description:

Dopamine antagonist with selectivity for D₂-like receptors (K_i values are 1.2, ~ 7, 2.3, ~ 80 and ~ 100 nM for D₂, D₃, D₄, D₁ and D₅ receptors respectively). Subtype-selective NMDA antagonist.

Physical and Chemical Properties:

Batch Molecular Formula: C21H23CIFNO2.HCI

Batch Molecular Weight: 412.33 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

ethanol to 10 mM with gentle warming DMSO to 25 mM with gentle warming

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 4629.

Beresford and Ward (1987) Haloperidol decanoate. A preliminary review of its pharmacodynamic and pharmacokinetic properties and therapeutic use in psychosis. Drugs **33** 31. PMID: 3545764.

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

Ilyin *et al* (1996) Subtype-selective inhibition of N-methyl-D-aspartate receptors by haloperidol. Mol.Pharmacol. *50* 1541. PMID: 8967976.

Lynch and Gallagher (1996) Inhibition of N-methyl-D-aspartate receptors by haloperidol: development and pharmacological characterization in native and recombinant receptors. J.Pharmacol.Exp.Ther. **279** 154. PMID: 8858988.

