

Certificate of Analysis

Print Date: Jan 13th 2016

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Product Name: CP 809101 hydrochloride Catalog No.: 3041 Batch No.: 2

CAS Number: 1215721-40-6

IUPAC Name: 2-[(3-Chlorophenyl)methoxy]-6-(1-piperazinyl)pyrazine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₁₇N₄OCI.HCI

Batch Molecular Weight: 341.24 **Physical Appearance:** solid

Solubility: water to 20 mM

DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.47$ (Dichloromethane:Ethanol:Ammonia soln. [90:9:1])

HPLC: Shows >99.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 52.8 5.32 16.42 Found 52.84 5.27 16.33



Product Information

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Description:

Potent and selective 5-HT $_{2\text{C}}$ receptor agonist (pEC $_{50}$ values are 9.96, 7.19 and 6.81 for human 5-HT $_{2\text{C}}$, 5-HT $_{2\text{B}}$ and 5-HT $_{2\text{A}}$ receptors respectively). Displays antipsychotic activity; suppresses condition avoidance responding (CAR) and inhibits PCP and amphetamine-stimulated hyperactivity in rats following subcutaneous administration.

Physical and Chemical Properties:

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Batch Molecular Weight: 341.24 Physical Appearance: solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Usage Info:

water to 20 mM 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:

Siuciak *et al* (2007) CP-809,101, a selective 5-HT_{2C} agonist, shows activity in animal models of antipsychotic activity. Neuropharmacology **52** 279. PMID: 16949622.

Kalgutkar *et al* (2007) Genotoxicity of 2-(3-chlorobenzyloxy)-6-(piperazinyl)pyrazine, a novel 5-hydroxytryptamine_{2c} receptor agonist for the treatment of obesity: role of metabolic activation. Drug Metab.Dispos. **35** 848. PMID: 17344339.

Jensen *et al* (2013) Design, synthesis, and pharmacological characterization of *N*- and *O*-substituted 5,6,7,8-tetrahydro-4*H*-isoxazolo [4,5-*d*]azepin-3-ol analogues: novel 5-HT_{2A}/5-HT_{2C} receptor agonists with pro-cognitive properties. J.Med.Chem *56* 1211. PMID: 23301527.