

Certificate of Analysis

Print Date: Jan 13th 2016 **WWW.tocris.com**

Product Name: PNU 96415E Catalog No.: 2735 Batch No.: 2

CAS Number: 170856-41-4

IUPAC Name: 1-[2-(3,4-Dihydro-1*H*-2-benzopyran-1-yl)ethyl]-4-(4-fluorophenyl)piperazine dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₅FN₂O.2HCl

Batch Molecular Weight: 413.36

Physical Appearance: Off-white solid
Solubility: water to 10 mM
Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.5$ (Chloroform:Methanol:Ammonia soln. [9:1:3])

HPLC: Shows >99.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.02 6.58 6.78 Found 61.21 6.53 6.72



Product Information

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Description:

Antipsychotic agent. Displays high affinity for dopamine D₄ and serotonergic 5-HT_{2A} receptors and relatively weak affinity at D₂ receptors (K₁ values are 3.0, 5.8, 134, 181, 199, 240, 411 and > 678 nM for D₄, 5-HT_{2A}, 5-HT_{1A}, α_1 , D₂, D₃, D₁, α_2 and muscarinic receptors respectively). Inhibits exploratory locomotor activity and antagonizes d-amphetamine-induced locomotor stimulation in rats.

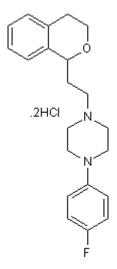
Physical and Chemical Properties:

Batch Molecular Formula: C₂₁H₂₅FN₂O.2HCl

Batch Molecular Weight: 413.36 Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water 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:

Tang *et al* (1997) PNU-96415E, a potential antipsychotic agent with clozapine-like pharmacological properties. J.Pharmacol.Exp.Ther. **281** 440. PMID: 9103528.

Goudie *et al* (1998) Discriminative stimulus properties of the atypical neuroleptic clozapine in rats: tests with subtype selective receptor ligands. Behav.Pharmacol. **9** 699. PMID: 9890260.

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