

Certificate of Analysis

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

Product Name: LY 334370 hydrochloride Catalog No.: 3079 Batch No.: 2

CAS Number: 199673-74-0

IUPAC Name: 4-Fluoro-*N*-[3-(1-methyl-4-piperidinyl)-1*H*-indol-5-yl]benzamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₂FN₃O.HCl.¼H₂O

Batch Molecular Weight: 392.38

Physical Appearance: Off-white solid

Solubility: water to 25 mM with gentle warming

DMSO to 25 mM with gentle warming

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Dichloromethane:Methanol [80:20])

HPLC: Shows >99.2% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 64.28 6.04 10.71 Found 63.97 6.15 10.59



Product Information

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IUPAC Name: 4-Fluoro-*N*-[3-(1-methyl-4-piperidinyl)-1*H*-indol-5-yl]benzamide hydrochloride

Description:

Selective 5-HT_{1F} receptor agonist (K_i values are 1.87, 16.4, > 100 (IC₅₀), 176, 189, 281, 1280, 1530, 1550, > 3000 (IC₅₀) and 3250 nM for 5-HT_{1F}, 5-HT_{1A}, 5-HT₄, 5-HT_{1E}, 5-HT_{1B}, 5-HT_{1D}, 5-HT_{2B}, 5-HT_{2A}, 5-HT₇, 5-HT₆ and 5-HT_{2C} receptors respectively). Displays antimigraine effects.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{21}H_{22}FN_3O.HCI.$ $\frac{1}{4}H_2O$

Batch Molecular Weight: 392.38 Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

water to 25 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:

Dupuis et al (1998) G-protein activationat 5-HT_{1A} receptors by the 5-ht_{1F} ligand LY334370 in guinea-pig brain sections and recombinant cell lines. Br.J.Pharmacol. **124** 283. PMID: 9641544.

Shepheard *et al* (1999) Possible antimigraine mechanisms of action of the 5-HT_{1F} receptor agonist LY334370. Cephalalgia *19* 851. PMID: 10668103.

Wainscott *et al* (2005) [H³]LY334370, a novel radioligand for the 5-HT_{1F} receptor. I. In vitro characterization of binding properties. Naunyn-Schmied.Arch.Pharmacol. *371* 169.