

Certificate of Analysis

Print Date: Dec 12th 2017

Batch No.: 6

www.tocris.com

Catalog No.: 1757

Product Name: ALX 5407 hydrochloride

CAS Number: 200006-08-2

IUPAC Name: N-[(3R)-3-([1,1'-Biphenyl]-4-yloxy)-3-(4-fluorophenyl)propyl]-N-methylglycine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₄FNO₃.HCl

Batch Molecular Weight: 429.92 **Physical Appearance:** White solid

Solubility: ethanol to 50 mM

DMSO to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.1$ (Dichloromethane:Methanol [9:1])

HPLC: Shows 100% purity **Chiral HPLC:** Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 67.05 5.86 3.26 Found 67.06 5.78 3.06



Product Information

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Description:

Selective non-transportable inhibitor of the glycine transporter GlyT1 (IC $_{50}$ values are 3 nM and > 100 μ M for human GlyT1c and GlyT2 respectively). Does not recognize other glycine sites, including the glycine site on the NMDA receptor (IC $_{50}$ > 100 μ M). Racemate also available.

Physical and Chemical Properties:

Batch Molecular Formula: C24H24FNO3.HCI

Batch Molecular Weight: 429.92 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

ethanol to 50 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).

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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.

Licensing Information:

Sold with the permission of NPS Pharmaceuticals Inc. Strictly for *in vitro* use only

References:

Lipina et al (2005) Modulators of the glycine site on NMDA receptors, D-serine and ALX 5407, display similar beneficial effects to clozapine in mouse models of schizophrenia. Psychopharmacology 179 54. PMID: 15759151.

Atkinson et al (2001) ALX 5407: a potent, selective inhibitor of the hGlyT1 glycine transporter. Mol.Pharmacol. 60 1414. PMID: 11723250.

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