

## Certificate of Analysis

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**Product Name:** ALX 5407 hydrochloride

**Catalog No.:** 1757

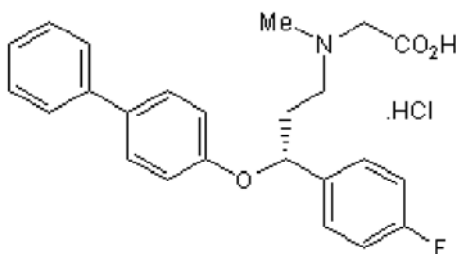
**Batch No.:** 2

**CAS Number:** 200006-08-2

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

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>24</sub>H<sub>24</sub>FNO<sub>3</sub>.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<sub>f</sub> = 0.4 (Dichloromethane:Methanol [9:1])  
**Melting Point:** Between 172 - 174°C  
**HPLC:** Shows >99.7% purity  
**Chiral HPLC:** Shows >99.2% purity  
**<sup>1</sup>H NMR:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	67.05	5.86	3.26
Found	67.1	5.88	3.25

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

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## Product Information

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### Description:

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

### Physical and Chemical Properties:

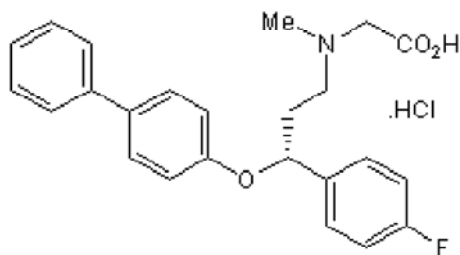
Batch Molecular Formula: C<sub>24</sub>H<sub>24</sub>FN<sub>3</sub>.HCl

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).

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.

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