

## Certificate of Analysis

**Product Name:** NFPS

**Catalog No.:** 2789

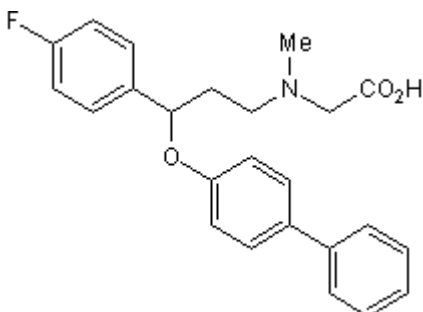
**Batch No.:** 2

CAS Number: 405225-21-0

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

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>24</sub>H<sub>24</sub>FNO<sub>3</sub>  
**Batch Molecular Weight:** 393.45  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 10 mM  
ethanol to 5 mM with gentle warming  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.58 (Chloroform:Methanol [4:1])  
**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	73.26	6.15	3.56
Found	72.94	6.24	3.5

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**Description:**

Selective, non-transportable inhibitor of GlyT1 which displays no activity at GABA or glutamate receptors ( $IC_{50}$  values are 2.8, 9.8 and 56000 nM for hGlyT1, rGlyT1 and rGlyT2 respectively). Enhances the amplitude of the NMDA component of glutamatergic EPSCs.

**Physical and Chemical Properties:**

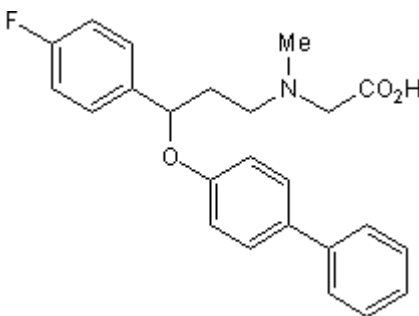
Batch Molecular Formula:  $C_{24}H_{24}FNO_3$

Batch Molecular Weight: 393.45

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Bergeron et al** (1998) Modulation of *N*-methyl-D-aspartate receptor function by glycine transport. *Proc.Natl.Acad.Sci.USA* **95** 15730.

**Harsing Jr. et al** (2003) The glycine transporter-1 inhibitors NFPS and Org 24461: a pharmacological study. *Pharmacol.Biochem.Behav.* **74** 881.

**Mallorga et al** (2003) Pharmacology and expression analysis of glycine transporter GlyT1 with [<sup>3</sup>H]-(*N*-[3-(4'-fluorophenyl)-3-(4'phenylphenoxy)propyl])sarcosine. *Neuropharmacology* **45** 585. PMID: 12941372.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 10 mM

ethanol to 5 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.

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