

Certificate of Analysis

Product Name: WAY 213613

Catalog No.: 2652

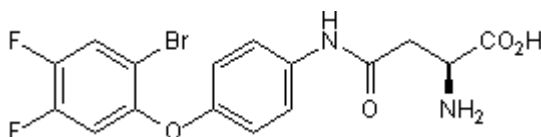
Batch No.: 1

CAS Number: 868359-05-1

IUPAC Name: *N*-[4-(2-Bromo-4,5-difluorophenoxy)phenyl]-L-asparagine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₁₃BrF₂N₂O₄
Batch Molecular Weight: 415.19
Physical Appearance: Off-white solid
Solubility: 1eq. NaOH to 100 mM
 DMSO to 100 mM
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.78 (Pyridine:Acetic acid:Water:Butanol [3:8:11:15])
HPLC: Shows 99.8% purity
Chiral HPLC: Shows 99.9% purity
¹H NMR: Consistent with structure
 Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -6 (Concentration = 1, Solvent = DMSO)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	46.29	3.16	6.74
Found	45.97	3.27	6.54

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

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Description:

Potent, non-substrate inhibitor of EAAT2 (GLT-1) that displays > 44-fold selectivity over EAAT1 and EAAT3 (IC₅₀ values are 85, 3787 and 5004 nM for EAAT2, EAAT3 and EAAT1 respectively). Exhibits no activity towards ionotropic and metabotropic glutamate receptors.

Physical and Chemical Properties:

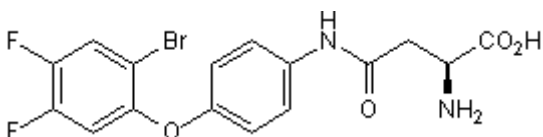
Batch Molecular Formula: C₁₆H₁₃BrF₂N₂O₄

Batch Molecular Weight: 415.19

Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

1eq. NaOH to 100 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.

References:

Dunlop et al (2005) Characterization of novel aryl-ether, biaryl, and fluorene aspartic acid and diamino propionic acid analogs as potent inhibitors of the high-affinity glutamate transporter EAAT2. *Mol.Pharmacol.* **68** 974. PMID: 16014807.

Beart and Shea (2007) Transporters for L-glutamate: an update on their molecular pharmacology and pathological involvement. *Br.J.Pharmacol.* **150** 5. PMID: 17088867.

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