

**Product Name:** ASP 2535

**Catalog No.:** 5308

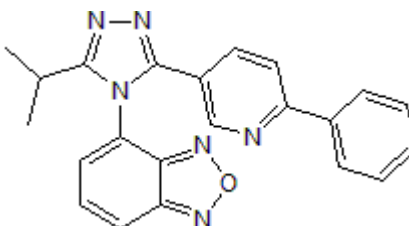
**Batch No.:** 1

CAS Number: 374886-51-8

IUPAC Name: 4-[3-(1-Methylethyl)-5-(6-phenyl-3-pyridinyl)-4H-1,2,4-triazol-4-yl]-2,1,3-benzoxadiazole

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>22</sub>H<sub>18</sub>N<sub>6</sub>O  
**Batch Molecular Weight:** 382.42  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.59 (Chloroform:Methanol [9:1])  
**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	69.1	4.74	21.98
Found	69.22	4.7	22.05

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**Description:**

Potent and selective GlyT1 inhibitor (IC<sub>50</sub> = 92 nM). Exhibits 50-fold selectivity over GlyT2. Attenuates MK 801-induced working memory deficits and PCP-induced visual learning deficits in mice. Orally available and brain penetrant.

**Physical and Chemical Properties:**

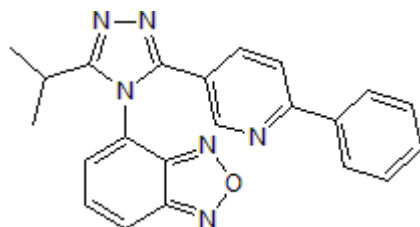
Batch Molecular Formula: C<sub>22</sub>H<sub>18</sub>N<sub>6</sub>O

Batch Molecular Weight: 382.42

Physical Appearance: Yellow solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Harada et al** (2012) A novel glycine transporter-1 (GlyT1) inhibitor, ASP2535 (4-[3-isopropyl-5-(6-phenyl-3-pyridyl)-4H-1,2,4-triazol-4-yl]-2,1,3-benzoxadiazole), improves cognition in animal models of cognitive impairment in schizophrenia and Alzheimer's disease. *Eur.J.Pharmacol.* **685** 59. PMID: 22542656.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol 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.

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