

**Product Name:** LY 233053

**Catalog No.:** 1521

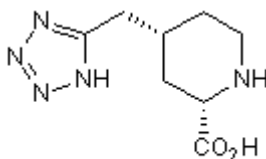
**Batch No.:** 1

CAS Number: 125546-04-5

IUPAC Name: (2*R*\*,4*S*\*)-4-(1*H*-Tetrazol-5-ylmethyl)-2-piperidinecarboxylic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>8</sub>H<sub>13</sub>N<sub>5</sub>O<sub>2</sub>·H<sub>2</sub>O  
**Batch Molecular Weight:** 229.24  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
DMSO to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



(and enantiomer)

**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.18 (Propan-2-ol:Water:Ammonia soln. [12:2:1])  
**HPLC:** Shows >99% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**<sup>13</sup>C NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	41.92	6.6	
Found	41.93	6.97	

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

**Product Name:** LY 233053

**Catalog No.:** 1521

**Batch No.:** 1

CAS Number: 125546-04-5

IUPAC Name: (2*R*\*,4*S*\*)-4-(1*H*-Tetrazol-5-ylmethyl)-2-piperidinecarboxylic acid

**Description:**

Competitive NMDA receptor antagonist (IC<sub>50</sub> = 7 nM) that displays no affinity for AMPA or kainate receptors at a concentration of 10 μM. Inhibits NMDA-induced neuronal degeneration and protects from NMDA-induced convulsions in neonatal rats.

**Physical and Chemical Properties:**

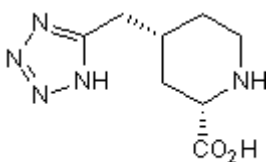
Batch Molecular Formula: C<sub>8</sub>H<sub>13</sub>N<sub>5</sub>O<sub>2</sub>·H<sub>2</sub>O

Batch Molecular Weight: 229.24

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



(and enantiomer)

**References:**

**Schoepp et al** (1990) Pharmacological characterization of LY233053: a structurally novel tetrazole-substituted competitive N-methyl-D-aspartic acid antagonist with a short duration of action. *J.Pharmacol.Exp.Ther.* **255** 1301. PMID: 2148188.

**Madden et al** (1992) Efficacy of LY233053, a competitive glutamate antagonist, in experimental central nervous system ischemia. *J.Neurosurg.* **76** 106. PMID: 1727148.

**Madden et al** (1993) Delayed therapy of experimental ischemia with competitive N-methyl-D-aspartate antagonists in rabbits. *Stroke* **24** 1068. PMID: 8322381.

**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water 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.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956