

## Certificate of Analysis

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**Product Name:** SCH 50911

**Catalog No.:** 0984

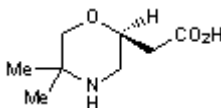
**Batch No.:** 3

**CAS Number:** 733717-87-8

**IUPAC Name:** (2S)-(+)-5,5-Dimethyl-2-morpholineacetic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>8</sub>H<sub>15</sub>NO<sub>3</sub>·0.1H<sub>2</sub>O  
**Batch Molecular Weight:** 175.01  
**Physical Appearance:** White crystalline solid  
**Solubility:** water to 100 mM  
 phosphate buffered saline to 100 mM  
**Storage:** Desiccate at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.4 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**Melting Point:** Between 267 - 276°C(Dec)  
**Chiral HPLC:** Shows >98% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +19.1 (Concentration = , Solvent = )  
**Microanalysis:**

	Carbon Hydrogen Nitrogen			
Theoretical	54.9	8.75	8	0 0 0
Found	54.88	8.82	7.96	0 0 0

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

## Product Information

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### Description:

A selective, competitive and orally active GABA<sub>B</sub> antagonist. Displays an IC<sub>50</sub> of 1.1 µM at GABA<sub>B</sub>, approximately 60 times that of CGP 35348 (Cat. No. 1245) and no binding affinity for GABA<sub>A</sub> at concentrations up to 100 µM.

### Physical and Chemical Properties:

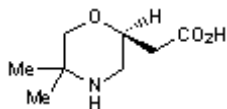
Batch Molecular Formula: C<sub>8</sub>H<sub>15</sub>NO<sub>3</sub>·0.1H<sub>2</sub>O

Batch Molecular Weight: 175.01

Physical Appearance: White crystalline solid

**Minimum Purity:** >98%

### Batch Molecular Structure:



**Storage:** Desiccate at -20°C

### Solubility & Usage Info:

water to 100 mM

phosphate buffered saline 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:

**Bolser et al** (1995) The pharmacology of SCH 50911: a novel, orally active GABA-B receptor antagonist. *J.Pharmacol.Exp.Ther.* **274** 1393. PMID: 7562513.

**Hosford et al** (1995) Characterization of the antiabsence effects of SCH 50911, a GABA<sub>B</sub> receptor antagonist, in the lethargic mouse, γ-hydroxybutyrate, and pentylentetrazole models. *J.Pharmacol. Exp.Ther.* **274** 1399. PMID: 7562514.

**Blythin et al** (1996) Substituted morpholine-2S-acetic acid derivatives: SCH 50911 and related compounds as novel GABA<sub>B</sub> antagonists. *Bioorg.Med.Chem.Lett.* **6** 1529.

**Ong et al** (1998) The morpholino-acetic acid analogue Sch 50911 is a selective GABA<sub>B</sub> receptor antagonist in rat neocortical slices. *Eur.J.Pharmacol.* **362** 35. PMID: 9865527.

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