

## Certificate of Analysis

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**Product Name:** (RS)-PPG

**Catalog No.:** 1220

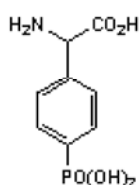
**Batch No.:** 2

CAS Number: 120667-15-4

IUPAC Name: (RS)-4-Phosphonophenylglycine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>8</sub>H<sub>10</sub>NO<sub>5</sub>P.H<sub>2</sub>O  
**Batch Molecular Weight:** 249.16  
**Physical Appearance:** White solid  
**Solubility:** 1eq. NaOH to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.25 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**Melting Point:** Greater than 300°C(Dec)  
**<sup>1</sup>H NMR:** Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen			
Theoretical	38.57	4.85	5.62	0.00
Found	38.66	4.8	5.59	0.00

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](http://www.tocris.com/distributors)  
 Tel:+1 612 379 2956

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**Catalog No.:** 1220

**Batch No.:** 2

CAS Number: 120667-15-4

IUPAC Name: (RS)-4-Phosphonophenylglycine

**Description:**

A potent and selective group III metabotropic glutamate receptor agonist, with approximately 25-fold preference for hmGlu<sub>8</sub>; anticonvulsant and neuroprotective in vivo.

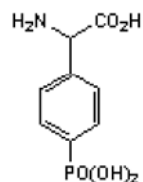
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>8</sub>H<sub>10</sub>NO<sub>5</sub>P.H<sub>2</sub>O

Batch Molecular Weight: 249.16

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

1eq. NaOH 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:**

**Gasparini et al** (1999) (R,S)-4-Phosphonophenylglycine, a potent and selective group III metabotropic glutamate receptor agonist, is anticonvulsive and neuroprotective in vivo. *J.Pharmacol.Exp.Ther.* **289** 1678. PMID: 10336568.

**Flor et al** (1998) Neuroprotection *in vitro* and *in vivo* by (R,S)-PPG, a potent and selective group III metabotropic glutamate receptor agonist. *Soc.Neurosci.Abstr.* **24** 431.11.

**Bigge et al** (1989) Exploration of phenyl-spaced 2-amino-(5,9)-phosphonoalkanoic acids as competitive N-MthD.-aspartic acid antagonists. *J.Med.Chem.* **32** 1580. PMID: 2544728.

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