

## Certificate of Analysis

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**Product Name:** UBP1112

**Catalog No.:** 1369

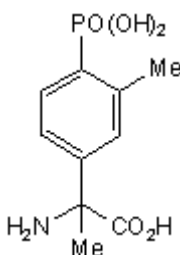
**Batch No.:** 2

CAS Number: 339526-74-8

IUPAC Name:  $\alpha$ -Methyl-3-methyl-4-phosphonophenylglycine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>14</sub>NO<sub>5</sub>P  
**Batch Molecular Weight:** 259.2  
**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> = 0.5 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**HPLC:** Shows >99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	46.34	5.44	5.4
Found	46	5.44	5.31

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

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**Description:**

A selective group III mGlu receptor antagonist (apparent  $K_d$  values are 5.1 and 488  $\mu$ M for group III and group II mGlu receptors respectively;  $IC_{50} > 1$  mM for group I, NMDA, AMPA and kainate receptors).

**Physical and Chemical Properties:**

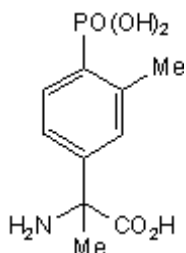
Batch Molecular Formula:  $C_{10}H_{14}NO_5P$

Batch Molecular Weight: 259.2

Physical Appearance: White solid

**Minimum Purity:** >99%

**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:**

**Conway *et al*** (2001) Synthesis of phenylglycine derivatives as potent and selective antagonists of group III metabotropic glutamate receptors. *Bioorg.Med.Chem.Lett.* **11** 777. PMID: 11277518.

**Miller *et al*** (2003) Phenylglycine derivatives as antagonists of group III metabotropic glutamate receptors expressed on neonatal rat primary afferent terminals. *Br.J.Pharmacol.* **139** 1523. PMID: 12922940.

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