

# **Certificate of Analysis**

Print Date: Dec 12th 2017

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Product Name: (RS)-MCPG Catalog No.: 0336 Batch No.: 13

CAS Number: 146669-29-6

IUPAC Name: (RS)- $\alpha$ -Methyl-4-carboxyphenylglycine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{10}H_{11}NO_4$ Batch Molecular Weight:209.2Physical Appearance:White solid

**Solubility:** 1.1eq. NaOH to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.67 (Pyridine:Acetic acid:Water:Butanol [3:8:11:22])

Chiral HPLC: Shows 100% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.41 5.3 6.7 Found 57.09 5.33 6.73

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## **Product Information**

Print Date: Dec 12th 2017

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Product Name: (RS)-MCPG Catalog No.: 0336 Batch No.: 13

CAS Number: 146669-29-6

IUPAC Name: (RS)-α-Methyl-4-carboxyphenylglycine

#### **Description:**

Non-selective group I/group II metabotropic glutamate receptor antagonist. S-enantiomer and Sodium Salt also available.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>10</sub>H<sub>11</sub>NO<sub>4</sub> Batch Molecular Weight: 209.2 Physical Appearance: White solid

**Minimum Purity: >99%** 

#### **Batch Molecular Structure:**

Storage: Store at RT

## Solubility & Usage Info:

1.1eq. 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:

**Joly** *et al* (1995) Molecular, functional and pharmacological characterization of the metabotropic glutamate receptor Type 5 splice variants: comparison with mGluR1. J.Neurosci. *15* 3970. PMID: 7751958.

Collingridge and Watkins (1994) Phenylglycine derivatives as metabotropic glutamate receptor antagonists. TiPS 15 333. PMID: 7992387.

**Eaton** *et al* (1993) Competitive antagonism at metabotropic glutamate receptors by (S)-4-carboxyphenylglycine (CPG) and (RS)-α-methyl-4-carboxyphenylglycine (MCPG). Eur.J.Pharmacol. **244** 195. PMID: 8381746.