

Product Name: (S)-MCPG

Catalog No.: 0337

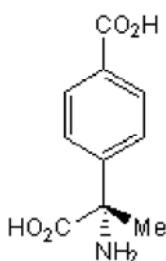
Batch No.: 17

CAS Number: 150145-89-4

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀H₁₁NO₄
Batch Molecular Weight: 209.2
Physical Appearance: White solid
Solubility: 1.1eq. NaOH to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.67 (Pyridine:Acetic acid:Water:Butanol [3:8:11:22])
Melting Point: Between 280 - 282°C
Chiral HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +99.4 (Concentration = 1, Solvent = 6N HCl)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	57.41	5.3	6.7
Found	57.31	5.35	6.72

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

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CAS Number: 150145-89-4

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Description:

Active isomer of (RS)-MCPG. Non-selective group I/group II metabotropic glutamate receptor antagonist. Available as part of the Group I mGlu Receptor Tocriset™, Group II mGlu Receptor Tocriset™ and Mixed mGlu Receptor Tocriset™. Racemate also available.

Physical and Chemical Properties:

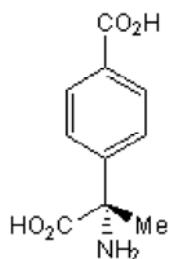
Batch Molecular Formula: C₁₀H₁₁NO₄

Batch Molecular Weight: 209.2

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Bordi et al (1996) Effects of the metabotropic glutamate receptor antagonist MCPG on spatial and context-specific learning. *Neuropharmacology* **35** 1557. PMID: 9025103.

Sekiyama et al (1996) Structure-activity relationships of new agonists and antagonists of different metabotropic glutamate receptor subtypes. *Br. J. Pharmacol.* **117** 1493. PMID: 8730745.

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

Jane et al (1993) Stereospecific antagonism by (+)- α -methyl-4-carboxyphenylglycine (MCPG) of 1S,3R-ACPD induced effects in neonatal rat motoneurons and rat thalamic neurons. *Neuropharmacology* **32** 725. PMID: 7689710.

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.

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