

# **Certificate of Analysis**

Print Date: Mar 9th 2022

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Product Name: (S)-4-Carboxyphenylglycine Catalog No.: 0323 Batch No.: 19

CAS Number: 134052-73-6

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_9H_9NO_4$ Batch Molecular Weight: 195.17

Physical Appearance: Off White solid

**Solubility:** 1eq. NaOH to 100 mM with gentle warming

Storage: Store at RT

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.58 (Pyridine:Acetic acid:Water:Butanol [3:8:11:14])

Chiral HPLC: Shows 100% purity

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

Mass Spectrum: Consistent with structure

**Optical Rotation:**  $[\alpha]_D = +157.7$  (Concentration = 1, Solvent = 6N HCl)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.39 4.65 7.18 Found 55.57 4.56 7.19



## **Product Information**

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Product Name: (S)-4-Carboxyphenylglycine

CAS Number: 134052-73-6

**Description:** 

(S)-4-Carboxyphenylglycine is a competitive group I metabotropic glutamate receptor antagonist, with selectivity for  $mGlu_{1a/1a}$  over  $mGlu_{5a/5b}$ .

**Physical and Chemical Properties:** 

Batch Molecular Formula: C<sub>9</sub>H<sub>9</sub>NO<sub>4</sub> Batch Molecular Weight: 195.17 Physical Appearance: Off White solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:** 

Storage: Store at RT

Solubility & Usage Info:

1eq. NaOH to 100 mM with gentle warming

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).

Catalog No.: 0323

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:

**Doherty** *et al* (1999) Antagonist activity of α-substituted 4-carboxyphenylglycine analogues at group I metabotropic glutamate receptors expressed in CHO cells. Br.J.Pharmacol. *126* 205. PMID: 10051137.

**Brabet** *et al* (1995) Phenylglycine derivatives discriminate between mGluR1-and mGluR5-mediated responses. Neuropharmacology *34* 895. PMID: 8532171.

**Birse** et al (1993) Phenylglycine derivatives as new pharmacological tools for investigating the role of metabotropic glutamate receptors in the central nervous system. Neuroscience **52** 481. PMID: 7680790.