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Print Date: Jan 8th 2016

Certificate of Analysis

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Product Name: **(*S*)-3-Carboxy-4-hydroxyphenylglycine** **Catalog No.: 0329** **Batch No.: 4**

CAS Number: 55136-48-6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_9H_9NO_5.H_2O$

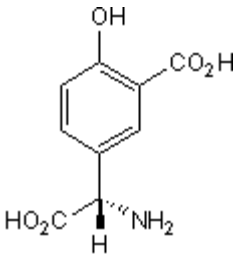
Batch Molecular Weight: 229.19

Physical Appearance: White solid

Solubility: 1eq. NaOH to 100 mM
water to 25 mM
phosphate buffered saline to 25 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.29 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: At 227°C

Chiral HPLC: Shows 99.0% purity

^{1}H NMR: Consistent with structure

Optical Rotation: $[\alpha]_D$ = +133.3 (Concentration = 0.75, Solvent = 6N HCl)

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	47.17	4.84	6.11
Found	47.17	4.95	6.11

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Product Name: **(*S*)-3-Carboxy-4-hydroxyphenylglycine** **Catalog No.: 0329** **Batch No.: 4**

CAS Number: 55136-48-6

Description:

Mixed group I metabotropic glutamate receptor antagonist and group II mGlu agonist. (R)-3-Carboxy-4-hydroxyphenylglycine (Cat. No. 0328) also available.

Physical and Chemical Properties:

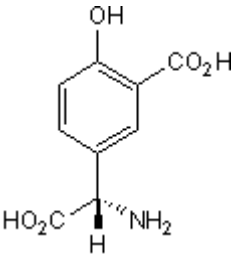
Batch Molecular Formula: $C_9H_9NO_5.H_2O$

Batch Molecular Weight: 229.19

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

1eq. NaOH to 100 mM
water to 25 mM
phosphate buffered saline to 25 mM

Whilst supplied of high purity, this material is very sensitive to air and light promoted oxidation, and may discolour slightly over time, particularly when in solution. Chemical and pharmacological analysis shows that this discolouration has no noticeable effect on its properties and can be safely ignored. Nonetheless, as a precautionary measure we recommend that the solid material be stored at -20°C away from light, and that solutions, once made up, are stored frozen and used within one week.

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:

Watkins *et al* (1987) Recent advances in the pharmacology of excitatory amino acids. Excitatory Amino Acid Transmission. Eds. Hicks, Lo 19-26.

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

Hayashi *et al* (1994) Analysis of agonist and antagonist activities of phenylglycine derivatives for different cloned metabotropic glutamate receptor sub-types. J.Neurosci. ***14*** 3370. PMID: 8182479.

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.