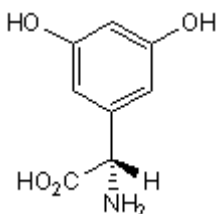


Product Name: (S)-3,5-DHPG
CAS Number: 162870-29-3
IUPAC Name: (S)-3,5-Dihydroxyphenylglycine

Catalog No.: 0805 **Batch No.:** 36

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₉NO₄·H₂O
Batch Molecular Weight: 201.18
Physical Appearance: Off-white solid
Solubility: water to 50 mM
 phosphate buffered saline to 50 mM
 DMSO to 20 mM with gentle warming
Storage: Desiccate at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.35 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
HPLC: Shows 99.8% purity
Chiral HPLC: Shows >99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +130.5 (Concentration = 1, Solvent = 6M HCl)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	47.76	5.51	6.96
Found	47.81	5.54	7.03

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

Product Name: (S)-3,5-DHPG

Catalog No.: 0805

Batch No.: 36

CAS Number: 162870-29-3

IUPAC Name: (S)-3,5-Dihydroxyphenylglycine

Description:

Selective group I mGlu receptor agonist. Also available as part of the Group I mGlu Receptor Tocriset™ and Mixed mGlu Receptor Tocriset™. (RS)-3,5-DHPG (Cat. No. 0342) also available.

Physical and Chemical Properties:

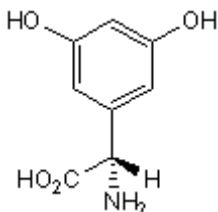
Batch Molecular Formula: C₈H₉NO₄·H₂O

Batch Molecular Weight: 201.18

Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

water to 50 mM

phosphate buffered saline to 50 mM

DMSO to 20 mM with gentle warming

Whilst supplied of high purity, this product is very sensitive to air and light promoted oxidation, and may discolour slightly over time. Chemical and pharmacological analysis shows that this discolouration has no noticeable effect on its properties and can be safely ignored. Further analysis has shown that this product rapidly decomposes when dissolved in alkaline solution. Therefore, as a precautionary measure we recommend that the solid material be stored at -20°C, away from light, under which conditions it should be stable for 6 months from the date of purchase. When made up, stock solutions should be aliquoted, stored at -20°C 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:

Schoepp et al (1994) 3,5-Dihydroxyphenylglycine is a highly selective agonist for phosphoinositide-linked metabotropic glutamate receptors in the rat hippocampus. *J.Neurochem.* **63** 769. PMID: 8035201.

Baker et al (1995) Enzymatic resolution and pharmacological activity of the enantiomers of 3,5-dihydroxyphenylglycine, a metabotropic glutamate receptor agonist. *Bioorg.Med.Chem.Lett.* **5** 223.

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.

Wisniewski and Car (2002) (S)-3,5-DHPG: a review. *CNS Drug Rev.* **8** 101. PMID: 12070529.

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