

Product Name: (RS)-3 5-DHPG

Catalog No.: 342

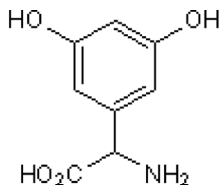
Batch No.: 2

CAS Number: 146255-66-5

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₉NO₄·¼H₂O
Batch Molecular Weight: 187.66
Physical Appearance: Off White solid
Solubility: water to 10 mM
 phosphate buffered saline to 10 mM
 1eq. NaOH to 100 mM
 1eq. HCl to 100 mM
Storage: Desiccate at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.17 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
HPLC: Shows 99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	51.2	5.1	7.46
Found	51.34	5.07	7.39

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

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CAS Number: 146255-66-5

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

Description:

(RS)-3,5-DHPG is a selective group I metabotropic glutamate receptor agonist which activates both mGlu₁ and mGlu₅. Also reported to be an antagonist at metabotropic glutamate receptors linked to phospholipase D. S-enantiomer also available.

Physical and Chemical Properties:

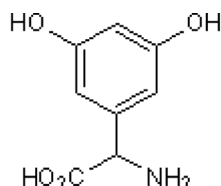
Batch Molecular Formula: C₈H₉NO₄·¼H₂O

Batch Molecular Weight: 187.66

Physical Appearance: Off White solid

Minimum Purity: ≥99%

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 10 mM

phosphate buffered saline to 10 mM

1eq. NaOH to 100 mM

1eq. HCl to 100 mM

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 and should be viable 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. When purchased as a 1mg unit, this product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Mistry et al (1998) Regulation of phosphoinositide turnover in neonatal rat cerebral cortex by group I- and II-selective metabotropic glutamate receptor agonists. *Br.J.Pharmacol.* **123** 581. PMID: 9504400.

Palmer et al (1997) The group I mGlu receptor agonist DHPG induces a novel form of LTD in the CA1 region of the hippocampus. *Neuropharmacology* **36** 1517. PMID: 9517422.

Pellegrini-Giampietro et al (1998) Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus. *Br.J.Pharmacol.* **118** 1035. PMID: 8799579.

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