

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@m2stage.hellobio.com



DATASHEET

(R,S)-3,5-DHPG

Product overview

Name	(R,S)-3,5-DHPG
Cat No	HB0026
Alternative names	(RS)-3,5-Dihydroxyphenylglycine
Biological action	Agonist
Purity	>99%
Customer comments	Getting on well with <i>DHPG</i> & <i>picrotoxin</i> – they do what they're supposed to! Professor Bruno Frenguelli, University of Warwick, UK

Description	Selective group I (mGluR ₁ / mGluR ₅) agonist
-------------	--

Images



Biological Data

Biological description	(R,S)-3,5-DHPG is a selective group I mGluR (mGluR ₁ / mGluR ₅) agonist. (R,S)-3,5-DHPG stimulates phospholipase C (PLC) response and inhibits phospholipase D (PLD) response. (R,S)-3,5-DHPG also induces LTD in the hippocampus. The active enantiomer of DHPG: (S)-3,5-DHPG is also available.
------------------------	---

Solubility & Handling

Storage instructions	-20 °C (desiccate). Protect from light.
Solubility overview	Soluble in water (10mM)
Handling	The compound is of high purity, however it is air sensitive and light promoted oxidation may cause slight discoloration of the compound. Product performance should not be affected, and this decolourisation can be ignored.

It has been shown that this compound rapidly decomposes when dissolved in alkaline solution. We

Storage instructions

-20 °C (desiccate). Protect from light.
therefore recommend that you store the solid material at -20 °C and protect from light. The compound should be stable for a least 6 months.

When possible, you should make up solutions and use immediately. If storage of solutions is required, you should aliquot out the solution into tightly sealed vials and store at -20 °C and store these for up to one month. Allow the product to equilibrate to RT for at least one hour before opening and using.

Important

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

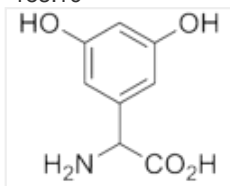
Chemical Data

Chemical name

(*RS*)-3,5-Dihydroxyphenylglycine

Molecular Weight

183.16

Chemical structure**Molecular Formula**

C₈H₉NO₄

CAS Number

146255-66-5

PubChem identifier

108001

SMILES

C1=C(C=C(C=C1O)O)C(C(=O)O)N

Source

Synthetic

InChi

InChI=1S/C8H9NO4/c9-7(8(12)13)4-1-5(10)3-6(11)2-4/h1-3,7,10-11H,9H2,(H,12,13)

InChiKey

HOOWCUZPEFNHDT-UHFFFAOYSA-N

Appearance

White solid

References

Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus.

Pellegrini-Giampietro DE *et al* (1996) Br J Pharmacol 118(4)

PubMedID

[8799579](#)

The group I mGlu receptor agonist DHPG induces a novel form of LTD in the CA1 region of the hippocampus.

Palmer MJ *et al* (1997) Neuropharmacology 36(11-12)

PubMedID

[9517422](#)

Interaction of DHPG-LTD and synaptic-LTD at senescent CA3-CA1 hippocampal synapses.

Kumar A *et al* (2014) Hippocampus 24(4)

PubMedID

[24390964](#)
