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

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

customercare-usa@hellobio.com

DATASHEET

(R,S)-CHPG

Product overview

Name	(R,S)-CHPG
Cat No	HB0033
Alternative names	(R,S)-2-Amino-2-(2-chloro-5-hydroxyphenyl)acetic acid
Biological action	Agonist
Purity	>98%
Description	Selective $mGlu_5$ agonist

Images

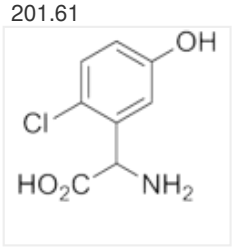
Biological Data

Biological description	Selective $mGlu_5$ receptor agonist which shows no activity at $mGlu_1$. Potentiates NMDA-induced depolarizations in rat hippocampal slices. Active *in vivo*. Water soluble CHPG sodium salt also available.

Solubility & Handling

Storage instructions	+4°C (desiccate)
Solubility overview	Soluble in 0.1M NaOH (100 mM)
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	(*R*,*S*)-2-Amino-2-(2-chloro-5-hydroxyphenyl)acetic acid
Molecular Weight	201.61
Chemical structure	

Molecular Formula	$C_8H_8NO_3Cl$
CAS Number	170846-74-9
PubChem identifier	3645780
SMILES	C1=CC(=C(C=C1O)C(C(=O)O)N)Cl
Source	Synthetic
InChi	InChI=1S/C8H8ClNO3/c9-6-2-1-4(11)3-5(6)7(10)8(12)13/h1-3,7,11H,10H2,(H,12,13)
InChiKey	UNIDAFCQFPGYJJ-UHFFFAOYSA-N
MDL number	MFCD01321059
Appearance	Off-white solid

References

(RS)-2-chloro-5-hydroxyphenylglycine (CHPG) activates mGlu5, but no mGlu1, receptors expressed in CHO cells and potentiates NMDA responses in the hippocampus.

Doherty AJ *et al* (1997) Neuropharmacology 36(2)
PubMedID 9144665

Activation of mGluR5 attenuates NMDA-induced neurotoxicity through disruption of the NMDAR-PSD-95 complex and preservation of mitochondrial function in differentiated PC12 cells.

Dai SH *et al* (2014) Int J Mol Sci 15(6)
PubMedID 24941251

The selective mGluR5 agonist CHPG protects against traumatic brain injury in vitro and in vivo via ERK and Akt pathway.

Chen T *et al* (2012) Int J Mol Med 29(4)
PubMedID 22211238

Characterisation of the actions of group I metabotropic glutamate receptor subtype selective ligands on excitatory amino acid release and sodium-dependent re-uptake in rat cerebrocortical minislices.

Fazal A *et al* (2003) J Neurochem 86(6)
PubMedID 12950444