

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)-CHPG

### Product overview

|                          |                                                       |
|--------------------------|-------------------------------------------------------|
| <b>Name</b>              | (R,S)-CHPG                                            |
| <b>Cat No</b>            | HB0033                                                |
| <b>Alternative names</b> | (R,S)-2-Amino-2-(2-chloro-5-hydroxyphenyl)acetic acid |
| <b>Biological action</b> | Agonist                                               |
| <b>Purity</b>            | >98%                                                  |
| <b>Description</b>       | Selective mGlu <sub>5</sub> agonist                   |

### Images



### Biological Data

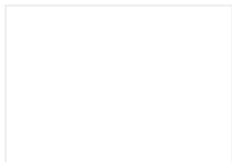
|                               |                                                                                                                                                                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Biological description</b> | Selective mGlu <sub>5</sub> receptor agonist which shows no activity at mGlu <sub>1</sub> . Potentiates NMDA-induced depolarizations in rat hippocampal slices. Active <i>in vivo</i> . Water soluble <b>CHPG sodium salt</b> also available. |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

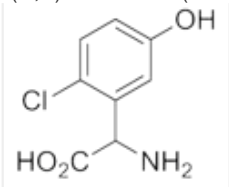
### Solubility & Handling

|                             |                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage instructions</b> | +4 °C (desiccate)                                                                                                             |
| <b>Solubility overview</b>  | Soluble in 0.1M NaOH (100 mM)                                                                                                 |
| <b>Important</b>            | This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use. |

### Chemical Data

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| <b>Chemical name</b>      | (R,S)-2-Amino-2-(2-chloro-5-hydroxyphenyl)acetic acid |
| <b>Molecular Weight</b>   | 201.61                                                |
| <b>Chemical structure</b> |                                                       |



|                           |                                                                                  |
|---------------------------|----------------------------------------------------------------------------------|
| <b>Chemical name</b>      | (R,S)-2-Amino-2-(2-chloro-5-hydroxyphenyl)acetic acid                            |
|                           |  |
| <b>Molecular Formula</b>  | C <sub>8</sub> H <sub>8</sub> NO <sub>3</sub> Cl                                 |
| <b>CAS Number</b>         | 170846-74-9                                                                      |
| <b>PubChem identifier</b> | 3645780                                                                          |
| <b>SMILES</b>             | C1=CC(=C(C=C1O)C(C(=O)O)N)Cl                                                     |
| <b>Source</b>             | Synthetic                                                                        |
| <b>InChi</b>              | 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)    |
| <b>InChiKey</b>           | UNIDAFQCQFPGYJJ-UHFFFAOYSA-N                                                     |
| <b>MDL number</b>         | MFCD01321059                                                                     |
| <b>Appearance</b>         | 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](#)