

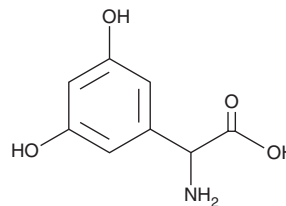
# PRODUCT INFORMATION



## (R,S)-3,5-DHPG

Item No. 35912

**CAS Registry No.:** 146255-66-5  
**Formal Name:**  $\alpha$ -amino-3,5-dihydroxy-benzeneacetic acid  
**Synonyms:** DL-3,5-Dihydroxyphenylglycine,  
(R,S)-3,5-Dihydroxyphenylglycine  
**MF:** C<sub>8</sub>H<sub>9</sub>NO<sub>4</sub>  
**FW:** 183.2  
**Purity:**  $\geq$ 98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

(R,S)-3,5-DHPG is supplied as a solid. A stock solution may be made by dissolving the (R,S)-3,5-DHPG in the solvent of choice, which should be purged with an inert gas. (R,S)-3,5-DHPG is soluble in the organic solvent DMSO. It is also soluble in water. The solubility of (R,S)-3,5-DHPG in DMSO and water is approximately 1 mg/ml respectively. We do not recommend storing the aqueous solution for more than one day.

### Description

(R,S)-3,5-DHPG is an agonist of group I metabotropic glutamate receptors (mGluRs).<sup>1</sup> It induces phosphoinositol hydrolysis in MCB3901, also known as AV12-664, cells expressing human mGluR1a and mGluR5a in a concentration-dependent manner. (R,S)-3,5-DHPG (10  $\mu$ M) potentiates NMDA-induced depolarizations in rat hippocampal slices. Intrathecal administration of (R,S)-3,5-DHPG (300 nmol/animal) increases mean blood pressure in anesthetized rats.<sup>2</sup> Intracerebroventricular administration of (R,S)-3,5-DHPG (1.5  $\mu$ mol/animal) induces seizures in rats.<sup>3</sup>

### References

1. Fitzjohn, S.M., Bortolotto, Z.A., Palmer, M.J., *et al.* The potent mGlu receptor antagonist LY341495 identifies roles for both cloned and novel mGlu receptors in hippocampal synaptic plasticity. *Neuropharmacology* **37(12)**, 144-1458 (1998).
2. Celuch, S.M. and García, M.d.C. Activation of spinal metabotropic glutamate receptors elicits cardiovascular responses in pentobarbital anesthetized rats. *Naunyn Schmiedebergs Arch Pharmacol.* **366(4)**, 343-349 (2002).
3. Camón, L., Vives, P., de Vera, N., *et al.* Seizures and neuronal damage induced in the rat by activation of group I metabotropic glutamate receptors with their selective agonist 3,5-dihydroxyphenylglycine. *J. Neurosci. Res.* **51(3)**, 339-348 (1998).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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