(RS)-PPG

Cat. No.: HY-107514

CAS No.: 120667-15-4

Molecular Formula: $C_8H_{10}NO_5P$

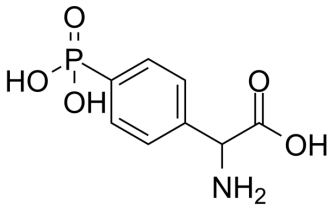
Molecular Weight: 231.14

Target: mGluR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description	(RS)-PPG is a potent and selective agonist for group III mGluRs. The EC_{50}s of 5.2 μM, 4.7 μM, 185 μM, and 0.2 μM for hmGluR4a, hmGluR6, hmGluR7b, and hmGluR8a, respectively. Anticonvulsive and neuroprotective activity[1].

IC_{50} & Target			
hmGluR8a 0.2 μM (EC50)	hmGluR6 4.7 μM (EC50)	hmGluR4a 5.2 μM (EC50)	hmGluR7b 185 μM (EC50)

In Vitro	Activation of group III mGluRs by treatment of neurons with (R,S)-PPG (100 μM) can significantly suppress the elevation of intracellular calcium and protect neurons from apoptosis induced by Aβ[31-35] (25 μM)[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Gasparini F, et al. (R,S)-4-phosphonophenylglycine, a potent and selective group III metabotropic glutamate receptor agonist, is anticonvulsive and neuroprotective in vivo. J Pharmacol Exp Ther. 1999 Jun;289(3):1678-87.

[2]. Zhao L, et al. Activation of group III metabotropic glutamate receptor reduces intracellular calcium in beta-amyloid peptide [31-35]-treated cortical neurons. Neurotox Res. 2009 Aug;16(2):174-83.

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