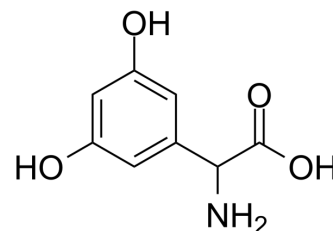


DHPG

Cat. No.:	HY-12598A
CAS No.:	146255-66-5
Molecular Formula:	C ₈ H ₉ NO ₄
Molecular Weight:	183.16
Target:	mGluR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 5 mg/mL (27.30 mM; ultrasonic and warming and heat to 60°C)					
	H ₂ O : 1 mg/mL (5.46 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		5.4597 mL	27.2985 mL	54.5971 mL
5 mM			1.0919 mL	5.4597 mL	10.9194 mL	
10 mM		0.5460 mL	2.7299 mL	5.4597 mL		
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS Solubility: 4.55 mg/mL (24.84 mM); Clear solution; Need ultrasonic and warming and heat to 60°C					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.5 mg/mL (2.73 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	DHPG ((RS)-3,5-DHPG) is an amino acid, which acts as a selective and potent agonist of group I mGluR (mGluR 1 and mGluR 5), shows no effect on Group II or Group III mGluRs ^[1] . DHPG ((RS)-3,5-DHPG) is also an effective antagonist of mGluRs linked to phospholipase D ^[2] .	
IC ₅₀ & Target	mGluR 1	mGluR 5

CUSTOMER VALIDATION

- iScience. 2021, 102812.
- Neuroscience. 2022 Jan 10;S0306-4522(22)00003-3.

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REFERENCES

[1]. Winder DG, et al. Metabotropic glutamate receptor (mGluR)-mediated potentiation of cyclic AMP responses does not require phosphoinositide hydrolysis: mediation by a group II-like mGluR. J Neurochem. 1995 Feb;64(2):592-9.

[2]. Pellegrini-Giampietro DE, et al. Pharmacological characterization of metabotropic glutamate receptors coupled to phospholipase D in the rat hippocampus. Br J Pharmacol. 1996 Jun;118(4):1035-43.

Caution: Product has not been fully validated for medical applications. For research use only.

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