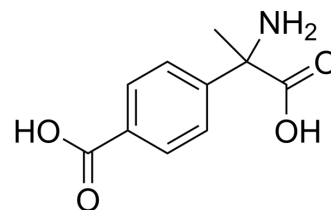


(RS)-MCPG

Cat. No.:	HY-100371		
CAS No.:	146669-29-6		
Molecular Formula:	C ₁₀ H ₁₁ NO ₄		
Molecular Weight:	209.2		
Target:	mGluR		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

1M NaOH : 100 mg/mL (478.01 mM; ultrasonic and adjust pH to 10 with NaOH)
 DMSO : 6 mg/mL (28.68 mM; Need ultrasonic and warming)
 H₂O : < 0.1 mg/mL (ultrasonic; heat to 80°C) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.7801 mL	23.9006 mL	47.8011 mL
	5 mM	0.9560 mL	4.7801 mL	9.5602 mL
	10 mM	0.4780 mL	2.3901 mL	4.7801 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

(RS)-MCPG (alpha-MCPG) is a competitive and selective group I/group II metabotropic glutamate receptor (mGluR) antagonist. (RS)-MCPG blocks theta-burst stimulation (TBS)-induced shifts in both juvenile and neonatal rat hippocampal neurons^{[1][2]}.

IC₅₀ & Target

mGluR

In Vitro

MCPG can block group I (mGluR1 and mGluR5) and group II receptors (mGluR2 and mGluR3)^[2].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

(RS)-MCPG (alpha-MCPG; 500 μM) blocks the TBS-induced shifts in EGABA in either juvenile or neonatal neurons^[1].
 Pretreatment with the low dose of (RS)-MCPG (25 nM; i.c.; daily; 5 days) significantly attenuates amphetamine-induced locomotor activity in 10-day-old male and female rats of Sprague-Dawley descent^[2].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Front Cell Neurosci. 2019 Jun 25;13:276.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Yang B et al. Regulation of GABA Equilibrium Potential by mGluRs in Rat Hippocampal CA1 Neurons. PLoS One, 2015 Sep 21, 10(9):e0138215.
- [2]. Fiona Yeuk-Lun Choi, et al. The effects of (RS)-MCPG on amphetamine-induced sensitization in neonatal rats.
-

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA