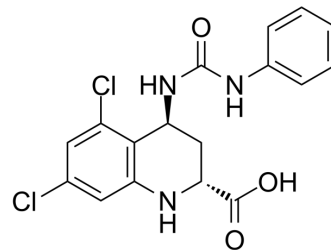


L-689560

Cat. No.:	HY-101178		
CAS No.:	139051-78-8		
Molecular Formula:	C ₁₇ H ₁₅ Cl ₂ N ₃ O ₃		
Molecular Weight:	380.23		
Target:	iGluR		
Pathway:	Membrane Transporter/Ion Channel; 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	L-689560 is a potent N-methyl-D-aspartate (NMDA) receptor antagonist at the GluN1 glycine binding site. L-689560 is widely used as a radiolabeled ligand in binding studies and used for study the roles of NMDA receptors in normal neurological processes as well as in diseases ^{[1][2]} .
In Vitro	L-689560 is a 2-carboxytetrahydroquinoline antagonist ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	L-689560 (1 mg/kg, ip) significantly reduces the neuroprotective effect of glycine after glycine receptors and the channel activity of NMDA receptors (NMDARs) are suppressed. L-689560 blocks glycine-induced increase of Akt phosphorylation in the MCAO model ^[1] MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Adult male Sprague-Dawley (SD) rats middle cerebral artery occlusion (MCAO) model ^[1]
Dosage:	1 mg/kg
Administration:	IP
Result:	Significantly reduced the neuroprotective effect of glycine after glycine receptors.

REFERENCES

[1]. Juan Chen, et al. A non-ionic activity of NMDA receptors contributes to glycine-induced neuroprotection in cerebral ischemia-reperfusion injury. 15 June 2017

[2]. Kvist T, et al. Crystal structure and pharmacological characterization of a novel N-methyl-D-aspartate (NMDA) receptor antagonist at the GluN1 glycine binding site. J Biol Chem. 2013 Nov 15;288(46):33124-35.

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