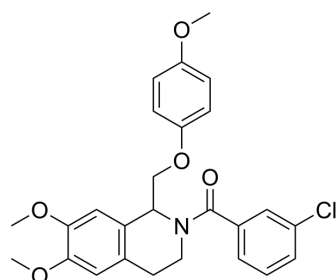


CIQ

Cat. No.:	HY-18699		
CAS No.:	486427-17-2		
Molecular Formula:	C ₂₆ H ₂₆ ClNO ₅		
Molecular Weight:	467.94		
Target:	iGluR		
Pathway:	Membrane Transporter/Ion Channel; 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

DMSO : ≥ 50 mg/mL (106.85 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.1370 mL	10.6851 mL	21.3703 mL
	5 mM	0.4274 mL	2.1370 mL	4.2741 mL
	10 mM	0.2137 mL	1.0685 mL	2.1370 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (5.34 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (5.34 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CIQ is a subunit-selective potentiator of NMDA receptors containing the NR2C or NR2D subunit. IC₅₀ value: 2.7 μM (EC₅₀, for NR2C) and 2.8 μM (EC₅₀, NR2D) Target: NMDA receptor CIQ increases channel opening frequency of recombinant NR2C or NR2D containing receptors by two-fold (EC₅₀ = 2.7 and 2.8 μM, respectively), with no effect on NR2A or NR2B subtypes. CIQ does not alter the EC₅₀ values for glutamate or glycine on channel opening. CIQ increases channel opening efficiency and enhances NMDA receptor responses. CIQ reduces associated behaviours in schizophrenia models and potentially enhances dopamine release in Parkinson's disease models.

IC₅₀ & Target

NMDA Receptor

CUSTOMER VALIDATION

- Behav Brain Res. 2023 Oct 14;456:114716.

See more customer validations on www.MedChemExpress.com

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

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