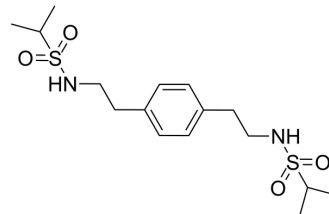


CMPDA

Cat. No.:	HY-12508		
CAS No.:	380607-77-2		
Molecular Formula:	C ₁₆ H ₂₈ N ₂ O ₄ S ₂		
Molecular Weight:	376.53		
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 : ≥ 100 mg/mL (265.58 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.6558 mL	13.2792 mL	26.5583 mL
	5 mM	0.5312 mL	2.6558 mL	5.3117 mL
	10 mM	0.2656 mL	1.3279 mL	2.6558 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 (6.64 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (6.64 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (6.64 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CMPDA is a positive allosteric modulator of AMPA receptors with EC50s of 45.4 ± 4.2 nM/63.4 ± 5.6 nM for GluA2i/GluA2o receptor. IC50 value: 45.4 ± 4.2 nM/63.4 ± 5.6 nM (GluA2i/GluA2o) [1] Target: AMPAR modulator CMPDA was nearly equipotent at modulating the two isoforms of GluA2 receptors, whereas CMPDB displayed a modest preference for the flip splice variant. Similar to CX614, CMPDA slowed the rate of deactivation of GluA2o receptors approximately 2-fold but had no effect on GluA2i receptor deactivation [1].

REFERENCES

[1]. Timm DE, et al. Structural and functional analysis of two new positive allosteric modulators of GluA2 desensitization and deactivation. Mol Pharmacol. 2011 Aug;80(2):267-80.

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