

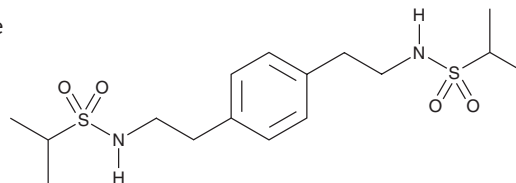
PRODUCT INFORMATION



CMPDA

Item No. 14626

CAS Registry No.: 380607-77-2
Formal Name: N,N'-(1,4-phenylenedi-2,1-ethanediyl)bis-2-propanesulfonamide
MF: C₁₆H₂₈N₂O₄S₂
FW: 376.5
Purity: ≥98%
UV/Vis.: λ_{max}: 219 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CMPDA is supplied as a crystalline solid. A stock solution may be made by dissolving the CMPDA in the solvent of choice, which should be purged with an inert gas. CMPDA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CMPDA in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of CMPDA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CMPDA in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CMPDA is a positive allosteric modulator of the ionotropic glutamate receptor GluA2.¹ It increases glutamate-induced calcium influx into HEK293 cells expressing human GluA2i or GluA2o receptors (EC₅₀s = 45.4 and 63.4 nM, respectively). CMPDA (10 μM) inhibits desensitization of rat GluA2o and GluA2i receptors, as well as slows the rate of deactivation of GluA2o, but not GluA2i, receptors, in HEK293 cells.

Reference

1. Timm, D.E., Benveniste, M., Weeks, A.M., *et al.* Structural and functional analysis of two new positive allosteric modulators of GluA2 desensitization and deactivation. *Mol. Pharmacol.* **80**(2), 267-280 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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