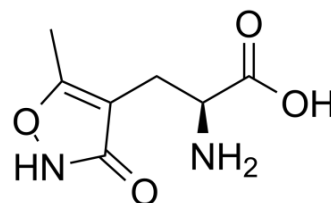


(S)-AMPA

Cat. No.:	HY-100815A
CAS No.:	83643-88-3
Molecular Formula:	C ₇ H ₁₀ N ₂ O ₄
Molecular Weight:	186.17
Target:	iGluR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(S)-AMPA (L-AMPA), an active S-enantiomer of AMPA, is a potent and selective AMPA receptor agonist ^{[1][2]} .
In Vitro	Superfusion of (S)-AMPA (1 μM) significantly attenuates CGRP release in a CB1-dependent manner ^[3] . 24-h exposure to (S)-AMPA (0.01-1000 μM) induces concentration-dependent neuronal cell death (EC ₅₀ of 3 μM) with cellular changes including neurite blebbing, chromatin condensation, and DNA fragmentation, indicative of apoptosis ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [3]. J W Brooks, et al. (S)-AMPA inhibits electrically evoked calcitonin gene-related peptide (CGRP) release from the rat dorsal horn: reversal by cannabinoid receptor antagonist SR141716A. *Neurosci Lett.* 2004 Nov 30;372(1-2):85-8.
- [4]. J A Larm, et al. Apoptosis induced via AMPA-selective glutamate receptors in cultured murine cortical neurons. *J Neurochem.* 1997 Aug;69(2):617-22.

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