



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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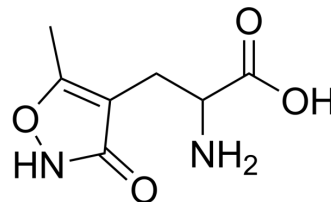
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## (RS)-AMPA

<b>Cat. No.:</b>	HY-100815B		
<b>CAS No.:</b>	77521-29-0		
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>10</sub> N <sub>2</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	186.17		
<b>Target:</b>	iGluR		
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 100 mg/mL (537.14 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	5.3714 mL	26.8572 mL	53.7143 mL
5 mM	1.0743 mL	5.3714 mL	10.7429 mL
10 mM	0.5371 mL	2.6857 mL	5.3714 mL

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

### BIOLOGICAL ACTIVITY

#### Description

(RS)-AMPA ((±)-AMPA) is a glutamate analogue and a potent and selective excitatory neurotransmitter L-glutamic acid agonist. (RS)-AMPA does not interfere with binding sites for kainic acid or NMDA receptors<sup>[1][2]</sup>.

#### In Vitro

(RS)-AMPA (10<sup>-3</sup>-10<sup>-4</sup> M) causes depolarizations of cultured rat spinal and brainstem neurones. The depolarization by (RS)-AMPA is clearly dose-dependent, although there is a great variability of effects between individual neurones. Application of (RS)-AMPA at 10<sup>-5</sup> M produces only small depolarizations (3-7 mV), whereas at 10<sup>-4</sup> M, the amplitudes of the depolarizations ranged from 4 to 33 mV. (RS)-AMPA also causes an increase of the discharge rate of spontaneously firing neurones or sometimes evoked a short burst of action potentials in silent cells. (RS)-AMPA exerts its depolarizing effects by activating glutamate/quisqualate receptors without affecting NMDA receptors<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Höslí L, et al. Effects of the glutamate analogue AMPA and its interaction with antagonists on cultured rat spinal and brain stem neurones. *Neurosci Lett.* 1983 Mar 28;36(1):59-62.

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

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