(S)-Willardiine

**Cat. No.:** HY-12499  
**CAS No.:** 21416-43-3  
**Molecular Formula:** C₇H₉N₃O₄  
**Molecular Weight:** 199.16  
**Target:** iGluR  
**Pathway:** Membrane Transporter/Ion Channel; Neuronal Signaling  
**Storage:**  
- Powder: -20°C 3 years, 4°C 2 years  
- In solvent: -80°C 6 months, -20°C 1 month

**SOLVENT & SOLUBILITY**

**In Vitro**  
DMSO: < 1 mg/mL (insoluble or slightly soluble)

**BIOLOGICAL ACTIVITY**

**Description**  
(S)-Willardiine is a potent agonist of AMPA/kainate receptors with EC50 of 44.8 uM. IC50 value: 44.8 uM(EC50)

[1] Target: AMPA/kainate receptor agonist in vitro: The (S)- but not (R)-isomers of willardiine and 5-bromowillardiine were potent agonists, producing rapidly but incompletely desensitizing responses [1]. At a concentration of 1.8 mM, Ca2+ inhibited the currents induced by 100 microM willardiine by approximately 50% [2].

in vivo: In newborn mice (P5, histopathology at P10), local injection of the AMPA receptor agonist S-bromo-willardiine at day 5 after birth induced cortical damage and white matter damage, which was reduced in a dose-dependent manner by the AMPA receptor antagonists [3].

**REFERENCES**


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

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