3,4,5-Trimethoxycinnamic acid

**Cat. No.** HY-W012123  
**CAS No.** 90-50-6  
**Molecular Formula:** C₁₂H₁₄O₅  
**Molecular Weight:** 238.24  
**Target:** GABA Receptor  
**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

**BIOLOGICAL ACTIVITY**

**Description**  
3,4,5-Trimethoxycinnamic acid is a phenylpropanoid isolated from the roots of Polygala tenuifolia WILLD, with anti-stress effect, prolonging the sleeping time in animals[1][2]. 3,4,5-Trimethoxycinnamic acid increases expression of GAD65 and γ-subunit of GABAA receptor, but shows no effect on the amounts of α-, β-subunits[2].

**IC₅₀ & Target**  
γ-subunit of GABAA receptor[2]

**In Vitro**  
3,4,5-Trimethoxycinnamic acid (10 μg/ml) increases expression of GAD65 and γ-subunit of GABAA receptor, but shows no effect on the amounts of α-, β-subunits[2].

**In Vivo**  
3,4,5-Trimethoxycinnamic acid (25-100 mg/kg, i.p.) exhibits sedative effect, and prolongs the sleeping time in rats[1]. 3,4,5-Trimethoxycinnamic acid (10 mg/kg, p.o.) significantly decreases locomotor activity in mice[2].

**REFERENCES**


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