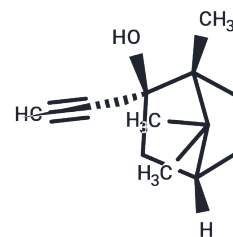


AMPA-IN-2

Chemical Properties

CAS No. :	75828-06-7
Formula:	C ₁₂ H ₁₈ O
Molecular Weight:	178.27
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	AMPA-IN-2 is an orally effective AMPA inhibitor capable of crossing the blood-brain barrier. By suppressing intrinsic neuronal excitability and inhibiting glutamatergic transmission excitability, AMPA-IN-2 alleviates seizures. In the pentylenetetrazol (PTZ) model, it demonstrates anticonvulsant effects, positioning it as a promising candidate with high broad-spectrum antiepileptic potential.
Targets(IC50)	iGluR
In vitro	AMPA-IN-2 (compound 13) at concentrations of (1 μM, 10 μM) reduces neuronal intrinsic excitability and the excitability of glutamatergic synaptic transmission.
In vivo	AMPA-IN-2 (compound 13) exhibits antiepileptic properties and reduces mortality at a dosage of 100 mg/kg administered intraperitoneally in a (maximum electroshock) MES-induced seizure model. In PTZ-induced seizure models, AMPA-IN-2 demonstrates potent antiepileptic activity at doses of both 30 mg/kg and 100 mg/kg when administered intraperitoneally. Additionally, a single 100 mg/kg intraperitoneal dose of AMPA-IN-2 alleviates seizure severity in chronic hippocampal kindling models. When given orally at 30 mg/kg, AMPA-IN-2 also shows antiepileptic effects in PTZ-induced seizure models.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.6095 mL	28.0473 mL	56.0947 mL
5 mM	1.1219 mL	5.6095 mL	11.2189 mL
10 mM	0.5609 mL	2.8047 mL	5.6095 mL
50 mM	0.1122 mL	0.5609 mL	1.1219 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481