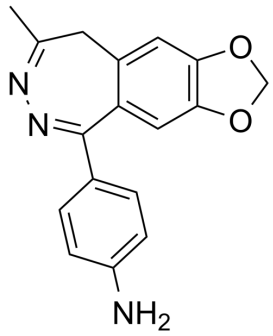
GYKI 52466

Cat. No.:	HY-103234
CAS No.:	102771-26-6
Molecular Formula:	$C_{17}H_{15}N_3O_2$
Molecular Weight:	293.32
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	GYKI 52466 is an orally active, highly selective and noncompetitive AMPA/kainate receptor antagonist with the IC_{50} values of 7.5 and 11μM, respectively. GYKI 52466 has good blood brain barrier permeability and anticonvulsant effect. GYKI 52466 can be used in Parkinson's disease research[1][2].

IC_{50} & Target	AMPA Receptor	Kainate Receptor
	7.5 μM (IC_{50})	11 μM (IC_{50})

In Vitro	GYKI 52466 (0.3-100 μM) inhibits inward currents activated by AMPA and Kainate receptor in cultured rat hippocampal neurons[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

GYKI 52466 (intraperitoneal injection; 1.76-13.2 mg/kg; once) treatment provides potent anticonvulsant protection against sound-induced seizures in DBA/2 mice[2].

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

Animal Model:	Male and female DBA/2 mice tested for sound-induced seizure responses[2]
Dosage:	1.76-13.2 mg/kg
Administration:	Intraperitoneal injection; 1.76-13.2 mg/kg; once
Result:	Observed Maximal anticonvulsant protection after the i.p. treatment (5-15 min).

REFERENCES

[1]. S D Donevan, et al. GYKI 52466, a 2,3-benzodiazepine, is a highly selective, noncompetitive antagonist of AMPA/kainate receptor responses. Neuron. 1993 Jan;10(1):51-9.

[2]. A G Chapman, et al. The anticonvulsant effect of the non-NMDA antagonists, NBQX and GYKI 52466, in mice. Epilepsy Res. 1991 Jul;9(2):92-6.

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