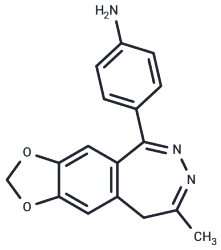
Data Sheet (Cat.No.T21449)

TargetMol

GYKI-52466

Chemical Properties



CAS No. : 102771-26-6

Formula: C17H15N3O2

Molecular Weight: 293.32

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	GYKI-52466 is a selective non-competitive AMPA receptor antagonist (IC50 values are 10-20, ~ 450 and >50 μM for AMPA-, kainate- and NMDA-induced responses, respectively) used as a Skeletal muscle relaxant, orally active anticonvulsant, neuroprotective and anxiolytic in vivo.
Targets(IC50)	Others,iGluR

Solubility Information

Solubility	H2O: Insoluble, DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4092 mL	17.0462 mL	34.0925 mL
5 mM	0.6818 mL	3.4092 mL	6.8185 mL
10 mM	0.3409 mL	1.7046 mL	3.4092 mL
50 mM	0.0682 mL	0.3409 mL	0.6818 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.

Reference

Nayak PK, Kerr DS. Functional preservation of hippocampal CA1 by low-dose GYKI-52466 preconditioning in a rat model of hypoxic-ischemic brain injury. Brain Res. 2015 Jul 10;1613:100-9. doi: 10.1016/j.brainres.2015.04.004. Epub 2015 Apr 11. PubMed PMID: 25869178.

Wu A, Wang C, Niu L. Mechanism of inhibition of the GluA1 AMPA receptor channel opening by the 2,3-benzodiazepine compound GYKI 52466 and a N-methyl-carbamoyl derivative. Biochemistry. 2014 May 13;53(18): 3033-41. doi: 10.1021/bi5002079. Epub 2014 May 1. PubMed PMID: 24738995; PubMed Central PMCID: PMC4025570.

Nayak PK, Kerr DS. Low-dose GYKI-52466: prophylactic preconditioning confers long-term neuroprotection and functional recovery following hypoxic-ischaemic brain injury. Neuroscience. 2013 Mar 1;232:128-38. doi: 10.1016 /j.neuroscience.2012.11.063. Epub 2012 Dec 16. PubMed PMID: 23246617.

Srivastava R, Xi ZX, Gardner EL. Cocaine-taking and cocaine-seeking behaviors in rats remain stable after systemic administration of GYKI 52466: a non-competitive AMPA receptor antagonist. Neurosci Lett. 2012 Feb 6;508(2):106-9. doi: 10.1016/j.neulet.2011.12.028. Epub 2011 Dec 22. PubMed PMID: 22206835; PubMed Central PMCID: PMC3267379.