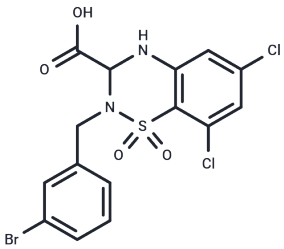
Data Sheet (Cat.No.T16797)

RPR104632

Chemical Properties



CAS No. :	154106-92-0
Formula:	C15H11BrCl2N2O4S
Molecular Weight:	466.13
Storage:	Store at low temperature 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	RPR104632 is a novel and potent antagonist located at the NMDA glycine site with neuroprotective activity.
Targets(IC50)	NMDAR,iGluR
In vitro	RPR104632 antagonizes the binding of [3H]5,7-dichlorokynurenic acid to the rat cerebral cortex with a Ki of 4.9 nM. In the presence of N-methyl-D-aspartate (NMDA), RPR104632 inhibits [3H]N-[1-(2-thienyl)cyclohexyl]-3,4-piperidine ([3H]TCP) binding with an IC50 of 55 nM. In a non-competitive manner, RPR104632 inhibits the NMDA-evoked increase in guanosine 3',5'-cyclic monophosphate (cGMP) levels of neonatal rat cerebellar slices (IC50 = 890 nM) and markedly reduces NMDA-induced neurotoxicity in rat hippocampal slices and cortical primary cell cultures. While MK-801 (1 μM) completely protects the CA1 and CA3 pyramidal neurones against NMDA-induced toxicity, these effects are not blocked by glycine. RPR104632 consistently produces a significant neuroprotective effect against all NMDA-induced toxicity and has no effect when added alone at concentrations up to 10 μM. The neuroprotective potency of RPR104632 is characterized by an EC50 of 4 μM[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1453 mL	10.7266 mL	21.4532 mL
5 mM	0.4291 mL	2.1453 mL	4.2906 mL
10 mM	0.2145 mL	1.0727 mL	2.1453 mL
50 mM	0.0429 mL	0.2145 mL	0.4291 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

Boireau A, et al. Neuroprotective effects of RPR 104632, a novel antagonist at the glycine site of the NMDA receptor, in vitro. Eur J Pharmacol. 1996 Apr 11;300(3):237-46.