Data Sheet (Cat.No.T25853)

TargetMol
YOUR TARGET MOLECULES

NBQX Disodium

Chemical Properties

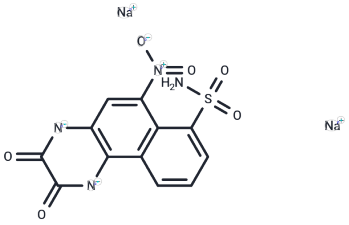
CAS No. : 479347-86-9

Formula: C12H6N4Na2O6S

Molecular Weight: 380.24

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	NBQX Disodium (FG9202 disodium) is a highly selective, competitive AMPA receptor antagonist with neuroprotective and anticonvulsant activity. NBQX Disodium is a salt of NBQX. NBQX is a potent and selective AMPA/rhodosinate receptor antagonist that can be used to antagonize the excitatory toxicity of glutamate. It has anticonvulsant effects in rodent models.
Targets(IC50)	GluR
In vitro	In HIP-009 cells, NBQX disodium salt inhibited both AMPA or kainic acid (KA) induced signals in a concentration-dependent manner, with IC50 values being 0.7 ± 0.1 and 0.7 ± 0.03 μM, respectively. The AMPA-evoked calcium rise was completely inhibited by NBQX disodium salt, whereas 68.6% ± 1.3% inhibition of the KA-induced signal was observed with 30 μM of NBQX disodium salt treatment.[1]
In vivo	Administration of NBQX disodium (FG9202; 20 mg/kg, i.p.; for 3 days) exhibits a reduction in PTZ-induced seizures. [2] In a rat model of focal ischemia, NBQX disodium demonstrates neuroprotective effects when administered intravenously as a bolus dose of 30 mg/kg at the time of MCA occlusion, followed by an additional dose at 1 hour post-occlusion. [3]

Solubility Information

Solubility	H2O: 34.2 mg/mL(90.0 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6299 mL	13.1496 mL	26.2992 mL
5 mM	0.526 mL	2.6299 mL	5.2598 mL
10 mM	0.263 mL	1.315 mL	2.6299 mL
50 mM	0.0526 mL	0.263 mL	0.526 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.

Reference

Fukushima K, et al. Characterization of Human Hippocampal Neural Stem/Progenitor Cells and Their Application to Physiologically Relevant Assays for Multiple Ionotropic Glutamate Receptors. J Biomol Screen. 2014;19(8):1174-