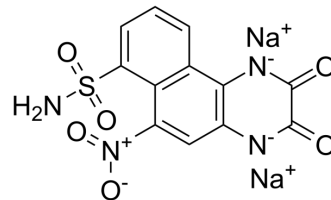


NBQX disodium

Cat. No.:	HY-15068A
CAS No.:	479347-86-9
Molecular Formula:	C ₁₂ H ₆ N ₄ Na ₂ O ₆ S
Molecular Weight:	380.24
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	NBQX disodium (FG9202 disodium) is a highly selective and competitive AMPA receptor antagonist. NBQX disodium has neuroprotective and anticonvulsant activity ^[1] .
IC₅₀ & Target	AMPA receptor ^[1]
In Vitro	NBQX disodium (FG9202 disodium) has a high affinity for AMPA and kainate binding sites with little or no affinity for the glutamate recognition site on the NMDA receptor complex ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	NBQX disodium (FG9202; 20 mg/kg, i.p.; for 3 days) decreases seizures induced by PTZ ^[2] . NBQX disodium is neuroprotective in a focal ischaemia model in the rat when given as an i.v. bolus dose of 30 mg/kg at the time of MCA occlusion and again at 1 h post occlusion ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Male Wistar rats that weighed 220-240 g with pentylenetetrazole (PTZ) ^[2]
Dosage:	20 mg/kg
Administration:	IP; for 3 days
Result:	Effectively reversed the behavioral abnormality of epileptic seizures of chronic PTZ administration (50mg/kg; i.p.; for 28 days) in rats.

CUSTOMER VALIDATION

- Nat Med. 2019 Feb;25(2):337-349.
- Neural Plast. 08 Jul 2021.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. 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 Sep; 19(8):1174-84.
- [2]. Wen Chen, et al. AMPA Receptor Antagonist NBQX Decreased Seizures by Normalization of Perineuronal Nets. PLoS One. 2016 Nov 23;11(11):e0166672.
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Caution: Product has not been fully validated for medical applications. For research use only.

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