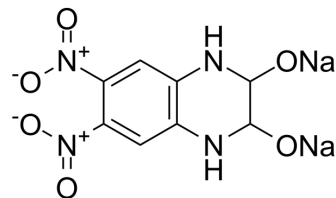


DNQX disodium salt

Cat. No.:	HY-103233
CAS No.:	1312992-24-7
Molecular Formula:	C ₈ H ₆ N ₄ Na ₂ O ₆
Molecular Weight:	300.14
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	DNQX (FG 9041) disodium salt, a quinoxaline derivative, is a selective, potent competitive non-NMDA glutamate receptor antagonist (IC ₅₀ s = 0.5, 2 and 40 μM for AMPA, kainate and NMDA receptors, respectively) ^[1] .
IC₅₀ & Target	Non-NMDA Receptor ^[1]
In Vitro	DNQX (FG 9041) disodium salt selectively depolarizes thalamic reticular nucleus (TRN) neurons ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	DNQX (FG 9041), a specific AMPA receptor antagonist, given as either a 5 mg/kg or 10 mg/kg intraperitoneal dose or into the lateral cerebral ventricle (5 μl of 0.5 mg/ml) significantly diminishes phencyclidine (PCP) (40 mg/kg) and ketamine (80, 100, 120 mg/kg) hsp70 induction in the posterior cingulate and retrosplenial cortex ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Death Discov. 2020 Sep 17;6:87.
- Neural Regen Res. 2022 Jan;17(1):178-184.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Honoré T, et al. Quinoxalinediones: potent competitive non-NMDA glutamate receptor antagonists. *Science*. 1988;241(4866):701-703.
- [2]. Lee SH, et al. Selective excitatory actions of DNQX and CNQX in rat thalamic neurons. *J Neurophysiol*. 2010;103(4):1728-1734.
- [3]. Sharp JW, et al. DNQX inhibits phencyclidine (PCP) and ketamine induction of the hsp70 heat shock gene in the rat cingulate and retrosplenial cortex. *Brain Res*. 1995;687(1-2):114-124.

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