

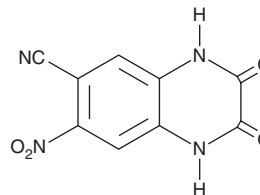
PRODUCT INFORMATION



CNQX

Item No. 14618

CAS Registry No.: 115066-14-3
Formal Name: 1,2,3,4-tetrahydro-7-nitro-2,3-dioxo-6-quinoxalinecarbonitrile
Synonyms: 6-cyano-7-Nitroquinoxaline-2,3-dione, FG 9065
MF: C₉H₄N₄O₄
FW: 232.2
Purity: ≥98%
UV/Vis.: λ_{max}: 217, 275, 315 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CNQX is supplied as a crystalline solid. A stock solution may be made by dissolving the CNQX in the solvent of choice, which should be purged with an inert gas. CNQX is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CNQX in these solvents is approximately 5 and 12 mg/ml, respectively.

CNQX is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CNQX should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CNQX has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CNQX is a competitive, non-NMDA glutamate receptor antagonist (IC₅₀s = 0.3 and 1.5 μM for AMPA and kainate receptors, respectively, versus IC₅₀ = 25 μM for NMDA receptors).{23071,23072} This compound has been used to specifically target AMPA and kainate receptor responses and thus differentiate from that of NMDA receptors.

References

- Honoré, T., Davies, S.N., Drejer, J., *et al.* Quinoxalinediones: Potent competitive non-NMDA glutamate receptor antagonists. *Science* **241**(4866), 701-703 (1988).
- Lee, S.-H., Govindaiah, G., and Cox, C.L. Selective excitatory actions of DNQX and CNQX in rat thalamic neurons. *J. Neurophysiol.* **103**(4), 1728-1734 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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