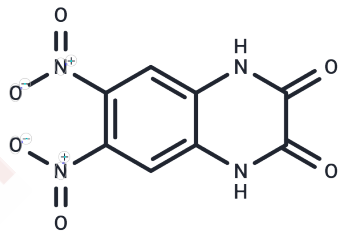
Data Sheet (Cat.No.T7304)

TargetMol

DNQX

Chemical Properties



CAS No. : 2379-57-9

Formula: C8H4N4O6

Molecular Weight: 252.14

Storage: 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	DNQX (FG 9041) is a competitive, non-NMDA glutamate receptor antagonist (IC50s = 0.5 and 0.1 μM for AMPA and kainate receptors, respectively)
Targets(IC50)	GluR,iGluR
In vitro	DNQX has been used to specifically target AMPA and kainate receptor responses and thus differentiate from that of NMDA receptors. DNQX does not stimulate a robust long-term potentiation in the hippocampus[1]

Solubility Information

Solubility	DMSO: 60 mg/mL (237.96 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (7.93 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9661 mL	19.8303 mL	39.6605 mL
5 mM	0.7932 mL	3.9661 mL	7.9321 mL
10 mM	0.3966 mL	1.983 mL	3.9661 mL
50 mM	0.0793 mL	0.3966 mL	0.7932 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

Muller D , Joly M , Lynch G . Contributions of quisqualate and NMDA receptors to the induction and expression of LTP[J]. Science, 1988, 242(4886):1694-1697.

Lee S H , Govindaiah G , Cox C L . Selective Excitatory Actions of DNQX and CNQX in Rat Thalamic Neurons[J]. Journal of Neurophysiology, 2010, 103(4):1728-1734.

Martin A , Max Récasens, Guiramand J . DNQX-induced toxicity in cultured rat hippocampal neurons: An apparent AMPA receptor-independent effect?[J]. Neurochemistry International, 2003, 42(3):251-260.

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