Product Name: NBQX
CAS Number: 118876-58-7
IUPAC Name: 2,3-Dioxo-6-nitro-1,2,3,4-tetrahydrobenzo[f]quinoxaline-7-sulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{12}H_{8}N_{4}O_{6}S.1\%H_{2}O
Batch Molecular Weight: 340.78
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM
Storage: Store at RT

2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
NBQX is a selective and competitive AMPA and kainate receptor antagonist (IC50 = 0.15 μM and 4.8 μM, respectively). NBQX blocks the antidepressant effects of 8-Hydroxy-DPAT hydrobromide (Cat. No. 0529), decreases mTOR and BDNF levels. NBQX is neuroprotective, anticonvulsant, antinociceptive and active in vivo. NBQX disodium salt, a more water-soluble form of NBQX, is also available.

Physical and Chemical Properties:
Batch Molecular Formula: C12H8N4O5S.¼H2O
Batch Molecular Weight: 340.78
Physical Appearance: Yellow solid
Minimum Purity: ≥98%

Storage: Store at RT

Solubility & Usage Info:
DMSO to 100 mM
1mM aqueous solutions of this product are best prepared using 2.5eq. of NaOH and back-titrating to pH 8-8.5 with concentrated HCl.

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:
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References: