

Certificate of Analysis

Print Date: Nov 11th 2019

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Product Name: PEAQX tetrasodium salt Catalog No.: 5018 Batch No.: 2

IUPAC Name: [[[(1S)-1-(4-Bromophenyl)ethyl]amino](1,2,3,4-tetrahydro-2,3-dioxo-5-quinoxalinyl)methyl] phosphonic acid

tetrasodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₃BrN₃Na₄O₅P.3H₂O

Batch Molecular Weight: 596.19

Physical Appearance: Off White solid

Solubility: water to 10 mM with gentle warming

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 34.25 3.21 7.05 Found 33.98 3.34 7.1

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

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Description:

Potent NMDA receptor antagonist ($IC_{50} = 8$ nM). Exhibits >100-fold selectivity for hGluN2A (formally hNR2A) containing receptors over hGluN2B (hNR2B). Anticonvulsant in vivo. Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₁₃BrN₃Na₄O₅P.3H₂O

Batch Molecular Weight: 596.19 Physical Appearance: Off White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

water to 10 mM with gentle warming

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.

References:

Auberson *et al* (2002) 5-Phosphonomethylquinoxalinediones as competitive NMDA receptor antagonists with a preference for the human 1A/2A, rather than 1A/2B receptor composition. Bioorg.Med.Chem.Lett. **12** 1099. PMID: 11909726.