



Certificate of Analysis

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Product Name: Naspm trihydrochloride Catalog No.: 2766 Batch No.: 5

CAS Number: 1049731-36-3

IUPAC Name: N-[3-[[4-[(3-Aminopropyl)amino]butyl]amino]propyl]-1-naphthaleneacetamide trihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₃₄N₄O.3HCl

Batch Molecular Weight: 479.91 **Physical Appearance:** White solid

Solubility: water to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.0% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.06 7.77 11.67 Found 54.91 7.79 11.58



Product Information

Print Date: Jul 5th 2019

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CAS Number: 1049731-36-3

IUPAC Name: N-[3-[[4-[(3-Aminopropyl)amino]butyl]amino]propyl]-1-naphthaleneacetamide trihydrochloride

Description:

Selective antagonist of Ca²⁺-permeable AMPA receptors; blocks AMPA receptors lacking the GluA2 subunit. Protects hippocampal neurons against global ischemia-induced cell death.

Physical and Chemical Properties:

Batch Molecular Formula: C22H34N4O.3HCI

Batch Molecular Weight: 479.91 Physical Appearance: White solid

Minimum Purity: >97%

Batch Molecular Structure:

Storage: Desiccate at +4°C

Solubility & Usage Info:

water to 100 mM

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).

Catalog No.: 2766

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:

Nilsen and England (2007) A subtype-selective, use-dependent inhibitor of native AMPA receptors. J.Am.Chem.Soc. 129 4902. PMID: 17391037.

Noh et al (2005) Blockade of calcium-permeable AMPA receptors protects hippocampal neurons against global ischemia-induced death. Proc.Natl.Acad.Sci.USA **102** 12230.

Koike et al (1997) Blocking effect of 1-naphthyl acetyl spermine on Ca²⁺-permeable AMPA receptors in cultured rat hippocampal neurons. Neurosci.Res. **29** 27. PMID: 9293490.

Tsubokawa *et al* (1995) Effects of spider toxin and its analogue on glutamate-activated currents in the hippocampal CA1 neuron after ischaemia. J.Neurophysiol. **74** 218. PMID: 7472325.

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