

Certificate of Analysis

Print Date: Feb 25th 2019

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Product Name: Nitrendipine Catalog No.: 0601 Batch No.: 1

CAS Number: 39562-70-4 EC Number: 254-513-1 IUPAC Name: 1,4-Dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3,5-pyridine dicarboxylic acid ethyl methyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{20}N_2O_6$ Batch Molecular Weight: 360.37

Physical Appearance: Yellow crystalline solid

Solubility: DMSO to 50 mM

ethanol to 25 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.2 \text{ (Chloroform)}$ Melting Point: Between 157 - 158°C

HPLC: Shows >99.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure



Product Information

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Description:

L-type calcium channel blocker. Induces autophagy.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₂₀N₂O₆ Batch Molecular Weight: 360.37

Physical Appearance: Yellow crystalline solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 mM ethanol to 25 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)

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:

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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:

Fleming *et al* (2011) Chemical modulators of autophagy as biological probes and potential therapeutics. Nat.Chem.Biol. **7** 9. PMID: 21164513.

Costa et al (1996) Characterization of a voltage-dependent L-type calcium channel from rabbit and turtle brain. Neurochem.Res. 21 537. PMID: 8726959.

Watanabe *et al* (1995) L-type calcium channel block by highly hydrophilic dihydropyridines in single ventricular cells of guinea-pig hearts. J.Mol.Cell.Cardiol. **27** 1271. PMID: 8531209.

Merck Index 12 6667.

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