

**Product Name:** Nimodipine

**Catalog No.:** 0600

**Batch No.:** 5

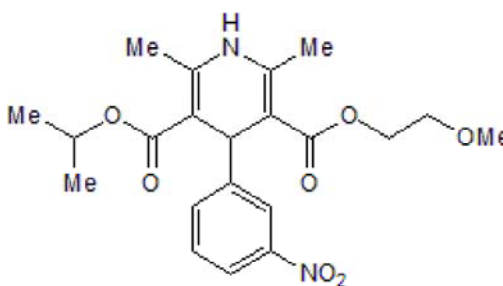
CAS Number: 66085-59-4

EC Number: 266-127-0

IUPAC Name: 1,4-Dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3,5-pyridinedicarboxylic acid 2-methoxyethyl 1-methylethyl ester

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>7</sub>.  
**Batch Molecular Weight:** 418.45  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

|             | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 60.28  | 6.26     | 6.69     |
| Found       | 60.01  | 6.26     | 6.72     |

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

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**Description:**

Nimodipine is a L-type Ca<sup>2+</sup> channel blocker. Induces autophagy.

**Physical and Chemical Properties:**

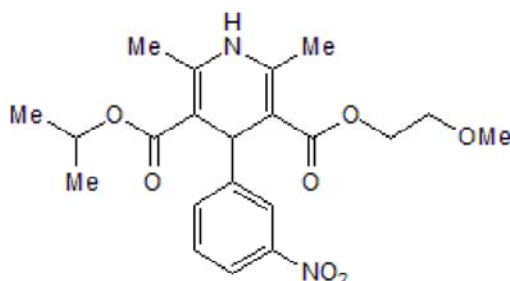
Batch Molecular Formula: C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>7</sub>.

Batch Molecular Weight: 418.45

Physical Appearance: Yellow solid

**Minimum Purity:** ≥99%

**Batch Molecular Structure:**



**Storage:** Store at RT

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

DMSO 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).

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:**

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

**Batuecas et al** (1998) Effects of chronic nimod. on working memory of old rats in relation to defects in synaptosomal calcium homeostasis. *Eur.J.Pharmacol.* **350** 141. PMID: 9696401.

**Kappelle et al** (1994) Beneficial effect of the Ca<sup>2+</sup> antagonist, nimodipine, on existing diabetic neuropathy in the BB/Wor rat. *Br.J.Pharmacol.* **111** 887. PMID: 8019766.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956