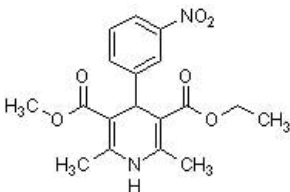


## Product datasheet

# Nitrendipine, L-type Ca<sup>2+</sup> channel blocker ab120139

2 Images

### Overview

|                               |  |
|-------------------------------|--|
| <b>Product name</b>           | Nitrendipine, L-type Ca <sup>2+</sup> channel blocker                              |
| <b>Description</b>            | L-type Ca <sup>2+</sup> channel blocker  |
| <b>Biological description</b> | L-type Ca <sup>2+</sup> channel blocker. Antihypertensive <i>in vivo</i> .         |
| <b>CAS Number</b>             | 39562-70-4   |
| <b>Chemical structure</b>     |  |

### Properties

|                             |   |
|-----------------------------|---|
| <b>Chemical name</b>        | 1,4-Dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3,5-pyridinedicarboxylic acid ethyl methyl ester   |
| <b>Molecular weight</b>     | 360.36  |
| <b>Molecular formula</b>    | C <sub>18</sub> H <sub>20</sub> N <sub>2</sub> O <sub>6</sub>   |
| <b>PubChem identifier</b>   | 4507  |
| <b>Storage instructions</b> | Store at Room Temperature. The product can be stored for up to 12 months.   |
| <b>Solubility overview</b>  | Soluble in DMSO to 50 mM and in ethanol to 25 mM  |
| <b>Handling</b>             | <p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Refer to SDS for further information</p> <p>Need more advice on solubility, usage and handling? Please visit our <a href="#">frequently asked questions (FAQ) page</a> for more details.</p> |
| <b>SMILES</b>               | <chem>CC=1NC(C)=C(C(C=1C(=O)OCC)c2cccc(c2)[N+](=[O-])=O)C(=O)OC</chem>  |
| <b>Source</b>               | Synthetic   |

## Applications

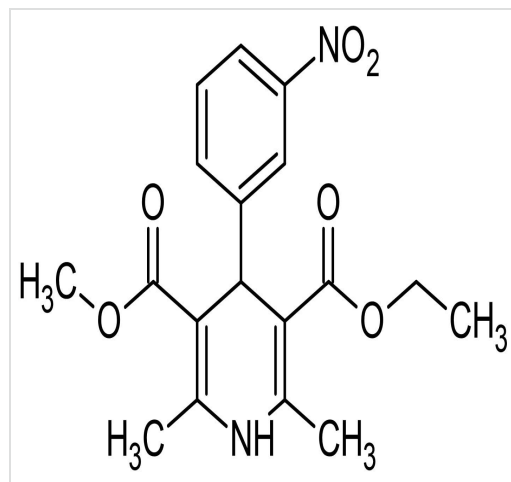
### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab120139 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

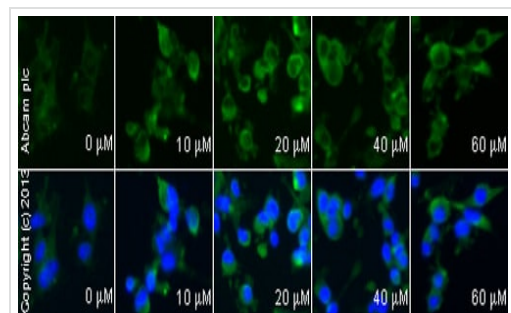
| Application        | Abreviews | Notes                                    |
|--------------------|-----------|--|
| Functional Studies |           | Use at an assay dependent concentration. |

## Images



Chemical Structure - Nitrendipine, L-type  $\text{Ca}^{2+}$  channel blocker (ab120139)

2D chemical structure image of ab120139, Nitrendipine, L-type  $\text{Ca}^{2+}$  channel blocker



Functional Studies - Nitrendipine, L-type  $\text{Ca}^{2+}$  channel blocker (ab120139)

**ab2770** staining aryl hydrocarbon receptor in MDA-MB-231 cells treated with nitrendipine (ab120139), by ICC/IF. Increase in aryl hydrocarbon receptor expression correlates with increased concentration of nitrendipine, as described in literature. The cells were incubated at 37°C for 6h in media containing different concentrations of ab120139 (nitrendipine) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab2770** (1/100 dilution) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-mouse polyclonal antibody (**ab96879**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

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- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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