

# Nisoldipine

Catalog No: **tcsc1131**



## Available Sizes

**Size:** 100mg

**Size:** 500mg

**Size:** 1g

**Size:** 5g



## Specifications

**CAS No:**

63675-72-9

**Formula:**

$C_{20}H_{24}N_2O_6$

**Pathway:**

Membrane Transporter/Ion Channel

**Target:**

Calcium Channel

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O :

**Alternative Names:**

BAY-k 5552

**Observed Molecular Weight:**

388.41

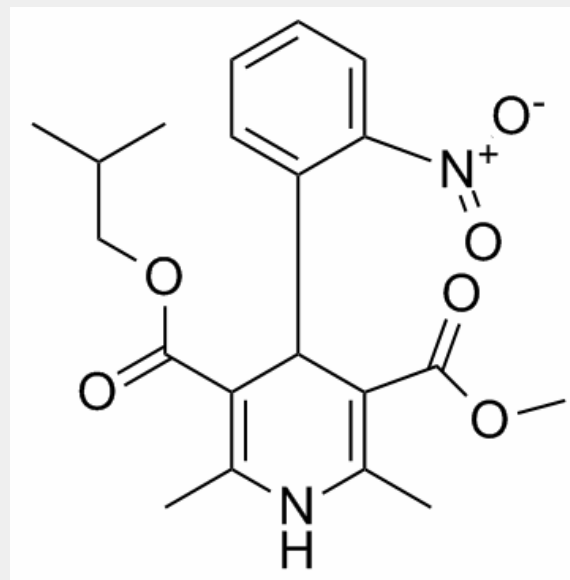
## Product Description

Nisoldipine(BAY-k 5552; Sular) is a calcium channel blocker belonging to the dihydropyridines class, specific for L-type Cav1.2 with IC50 of 10 nM.

IC50 value: 10 nM

Target: L-type Cav1.2

Nisoldipine is a potent blocker of L-type calcium channels. Nisoldipine binds directly to inactive calcium channels stabilizing their inactive conformation Similar to other DHP CCBs. Nisoldipine displays selectivity for arterial smooth muscle cells due to great number of inactive channels and the  $\alpha_1$  subunit of the channel. Nisoldipine is about 30 times less selective for delayed-rectifier K<sup>+</sup> channels than for L-type Ca<sup>2+</sup> channels, which inhibits IKr (rapidly activating delayed-rectifier K<sup>+</sup> current) with IC50 of 23  $\mu$ M, and IKs (slowly activating delayed-rectifier K<sup>+</sup> current)with IC50 of 40  $\mu$ M in guinea-pig ventricular myocytes. Nisoldipine also displays antioxidant potency with IC50 of 28.2  $\mu$ M both before and after the addition of active oxygen.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!