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DATASHEET

Cilnidipine

Product overview

Name	Cilnidipine
Cat No	HB1217
Alternative names	FRC 8653
Biological action	Blocker
Purity	>99%
Description	Potent L- / N-type calcium channel blocker

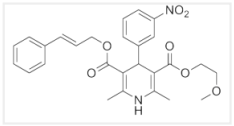
Biological Data

Biological description	Potent L- and N-type calcium channel blocker (IC_{50} values are 100 and 200 nM). Inhibits sympathetic neurotransmitter release via N-type Ca^{2+} channel block. Shows antihypertensive, cardioprotective, renoprotective and neuroprotective actions.

Solubility & Handling

Storage instructions	+4°C
Solubility overview	Soluble in DMSO (100mM) or ethanol (10mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1,4-Dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3,5-pyridinedicarboxylic acid 2-methoxyethyl(2*E*)-3-phenyl-2-propenyl ester
Molecular Weight	492.52
Chemical structure	
Molecular Formula	$C_{27}H_{28}N_2O_7$
CAS Number	132203-70-4
PubChem identifier	2752
SMILES	COCCOC(=O)C1=C(C)NC(C)=C(C1C1=CC=CC(=C1)[N+]([O-])=O)C(=O)OCC=CC1=CC=CC=C1
InChiKey	KJEBULYHNRNJTE-UHFFFAOYSA-N

References

Cilnidipine: a new generation Ca channel blocker with inhibitory action on sympathetic neurotransmitter release.

Takahara A (2009) Cardiovasc Ther 27(2)
PubMedID 19426250

Effect of cilnidipine, a novel dihydropyridine Ca++-channel antagonist, on N-type Ca++ channel in rat dorsal root ganglion neurons.

Fujii S *et al* (1997) J Pharmacol Exp Ther 280(3)
PubMedID 9067302

Neuroprotective effects of a dual L/N-type Ca(2+) channel blocker cilnidipine in the rat focal brain ischemia model.

Takahara A *et al* (2004) Biol Pharm Bull 27(9)
PubMedID 15340224