

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

Amlodipine besylate

Product overview

Name	Amlodipine besylate
Cat No	HB1214
Alternative names	Norvasc
Biological action	Blocker
Purity	>99%
Description	L-type calcium channel blocker

Biological Data

Biological description	L-type calcium channel blocker. Decreases eNOS expression in the aorta. Shows antiproliferative, antihypertensive, antioxidant, anti-inflammatory, vasoprotective and neuroprotective actions.
------------------------	--

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in water (10mM) and in DMSO (100mM)
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	2-[(2-Aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarbo xylic acid 3-ethyl 5-methyl ester benzenesulfonate
Molecular Weight	567.05
Chemical structure	The chemical structure shows a pyridine ring substituted at position 2 with a (2-aminoethoxy)methyl group (-CH2CH2NH2), at position 4 with a 2-chlorophenyl group, and at position 6 with a methyl group (-CH3). At position 3, there is a carboxylic acid group (-COOH) which is further substituted with a methyl ester group (-COOCH3) and a benzenesulfonate group (-C6H5SO3-).
Molecular Formula	C ₂₀ H ₂₅ ClN ₂ O ₅ .C ₆ H ₆ O ₃ S
CAS Number	111470-99-6
PubChem identifier	60496
SMILES	CCOC(=O)C1=C(NC(=C(C1C2=CC=CC=C2Cl)C(=O)OC)C)COCCN.C1=CC=C(C=C1S(=O)(=O)O)C(=O)OC(=O)C2=C(Cl)C=C(C=C2)C=C1
InChi	InChI=1S/C20H25ClN2O5.C6H6O3S/c1-4-28-20(25)18-15(11-27-10-9-22)23-12(2)16(19(24)26-3)17(18)13-7-5-6-8-14(13)21;7-10(8,9)6-4-2-1-3-5-6/h5-8,17,23H,4,9-11,22H2,1-3H3;1-5H,(H,7,8,9)
InChiKey	ZPBWCRDSRKPIDG-UHFFFAOYSA-N
MDL number	MFCD00887594

References

Antiproliferative effect of Ca2+ channel blockers on human epidermoid carcinoma A431 cells.

Yoshida J *et al* (2003) Eur J Pharmacol 472(1-2)

PubMedID 12860469

Calcium channel blockades exhibit anti-inflammatory and antioxidative effects by augmentation of endothelial nitric oxide synthase and the inhibition of angiotensin converting enzyme in the N(G)-nitro-L-arginine methyl ester-induced hypertensive rat aorta

Toba H *et al* (2005) Hypertens Res 28(8)

PubMedID

[16392774](#)

Calcium channel blockades exhibit anti-inflammatory and antioxidative effects by augmentation of endothelial nitric oxide synthase and the inhibition of angiotensin converting enzyme in the N(G)-nitro-L-arginine methyl ester-induced hypertensive rat aorta

Toba H *et al* (2005) Hypertens Res 28(8)

PubMedID

[16392774](#)

Neuroprotective effects of amlodipine besylate and benidipine hydrochloride on oxidative stress-injured neural stem cells.

Choi NY *et al* (2014) Brain Res 1551

PubMedID

[24440775](#)
