LKT Laboratories, Inc.

Benidipine Hydrochloride

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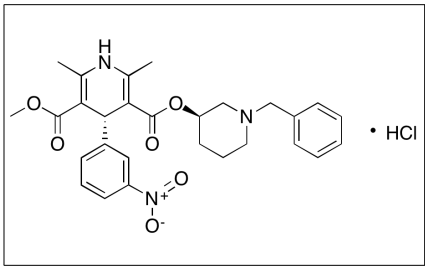
Product Information

Product ID B1752
CAS No. 91599-74-5
Chemical Name

Synonym KW-3049

Formula $C_{28}H_{31}N_3O_6 \cdot HCl$
Formula Wt. 542.03
Melting Point
Purity ≥98%
Solubility DMSO Solubility: 8 mg/mL (14.75 mM)



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
B1752	10 mg	$38.60
B1752	25 mg	$71.70
B1752	100 mg	$159.90

Store Temp Ambient
Ship Temp Ambient

Description Benidipine is a long-lasting dihydropyridine calcium channel blocker. Its antihypertensive activity involves the inhibition of Ca(2+) influx through L-type voltage dependent calcium channels and the ability to restore endothelial function. It prevents lysoPC-induced caspase-3 activation through stimulation of NO release thereby exerts its anti-apoptosis action on endothelial cells. Benidipine increases the maximal activity of ERK1/2 but has no significant effect on p38 MAPK, decreases mitochondrial cytochrome c release, and reduces caspase-9 activation.

Benidipine was shown to have antioxidant effect in reducing hydroxyl radicals formation and PKC-dependent NO production. It inhibits [3H]thymidine incorporation into vascular smooth muscle cells (VSMCs), an indication of its anti-proliferative effects which may be useful for the treatment of restenosis following angioplasty and atherosclerosis damages.
TEST!!!!!!

References

Matsubara M , Yao K, Hasegawa K. Benidipine, a dihydropyridine-calcium channel blocker, inhibits lysophosphatidylcholine-induced endothelial injury via stimulation of nitric oxide release.Pharmacol Res. 2006 Jan;53(1):35-43. PMID: 16172001.

Wang N , Minatoguchi S, Chen XH, et al.
Benidipine reduces myocardial infarct size involving reduction of hydroxyl radicals and production of protein kinase C-dependent nitric oxide in rabbits. J Cardiovasc Pharmacol. 2004 Jun;43(6):747-57. PMID: 15167267.

Ide S , Kondoh M, Satoh H, Karasawa A. Anti-proliferative effects of benidipine hydrochloride in porcine cultured vascular smooth muscle cells and in rats subjected to balloon catheterinduced endothelial denudation.Biol Pharm Bull. 1994 May;17(5):627-31. PMID: 7920421.