

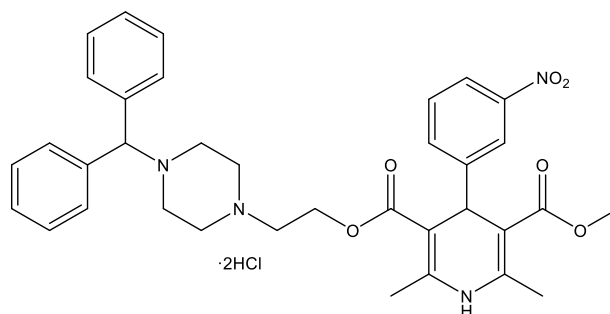
Catalog # 10-2045

Manidipine dihydrochloride

CAS# 89226-75-5

5-O-[2-(4-Benzhydrylpiperazin-1-yl)ethyl] 3-O-methyl-2,6-dimethyl-4-(3-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylate dihydrochloride; CV-4093·2HCl

Lot # FBS2129



Manidipine is a clinically useful antihypertensive.^{1,2} It is an inhibitor of L- and T-type calcium channels with high selectivity for vasculature. Manidipine has recently been found to be an inhibitor (IC₅₀ = 4.8 μM) of the SARS-CoV-2 main protease, 3CLpro.³ It also acts as an early entry inhibitor of human cytomegalovirus (EC₅₀ = 3.57 μM) *via* inhibition of the Immediate-Early 2 (IE2) protein.⁴

- 1) Kakihana *et al.* (1988), *Antihypertensive effect of CV-4093·2HCl, a new calcium antagonist, in three rat models of hypertension*; Jpn. J. Pharmacol., **48** 223
- 2) McKeage (2004), *Manidipine: a review of its use in the management of hypertension*; Drugs, **64** 1923
- 3) Ghahremanpour *et al.* (2020), *Identification of 14 Known Drugs as Inhibitors of the Main Protease of SARS-CoV-2*; ACS Med. Chem. Lett., **11** 2526
- 4) Mercorelli *et al.* (2018), *Repurposing the clinically approved calcium antagonist manidipine dihydrochloride as a new early entry inhibitor of human cytomegalovirus targeting the Immediate-Early 2 (IE2) protein*; Antiviral Res., **150** 130

PHYSICAL DATA

Molecular Weight:	683.63
Molecular Formula:	C ₃₅ H ₃₈ N ₄ O ₆ ·2HCl
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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