For Research Use Only

Manidipine dihydrochloride

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Catalog Number: CM03238

产品信息

Catalog Number:
CM03238

CAS号:
89226-75-5

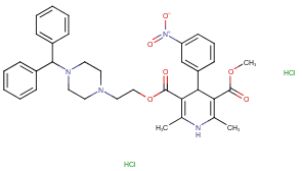
分子式:
$C_{35}H_{40}Cl_2N_4O_6$

主要靶点:
Calcium Channel

主要通路:
代谢|离子通道

分子量:
683.62

溶解度:
DMSO:60 mg/mL (87.77 mM);Ethanol:< 1 mg/mL (insoluble or slightly soluble);H2O:< 1 mg/mL (insoluble or slightly soluble)



靶点活性

Ca2+ channel:2.6 nM

体外活性

在纳摩尔级浓度的Manidipine,能够有效调节参与系膜细胞促炎性变化的基因转录。Manidipine抑制冠状动脉(pIC50=9.3 nM)和肾动脉(pIC50=9.1 nM)。Manidipine在高于0.1 nM浓度时降低Ca2+流,在100 nM浓度时阻断Ca2+流。

体内活性

在高血压大鼠中,口服 Manidipine（3 mg/kg和10 mg/kg）以剂量依赖性的方式降低大鼠的收缩压.Manidipine（10 mg/kg）给药1小时到3小时后,能够将血压降低到正常水平.

细胞实验

The mitogenic effect is measured by the amout of [3H]thymidine incorporated into DNA of human MCs and by assessment of cell proliferation. In brief, 1 × 105 quiescent cells is seeded into a 25-mL cell culture bottle and kept in low serum medium (0.1% FCS). On the following day, the cells are preincubated for 3 hours with Manidipine (10 nM) followed by stimulation with PDGF-BB (10 ng/mL) or incubated with low serum medium abone. The medium is replaced each day, and the cells are counted at days 1, 3 and 5.(Only for Reference)

储存

Powder: -20°C for 3 years | In solvent: -80°C for 1 year | Shipping with blue ice.