For Research Use Only

Atorvastatin hemicalcium salt

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Catalog Number: CM00666

产品信息

Catalog Number:
CM00666

CAS号:
134523-03-8

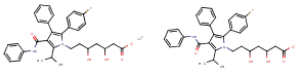
分子式:
$C_{33}H_{34}FN_2O_5 \cdot 1/_2Ca$

主要靶点:
Ferroptosis|HMG-CoA Reductase|Autophagy

主要通路:
凋亡|代谢|自噬

分子量:
577.67

溶解度:
DMSO:50 mg/mL (43.28 mM)



靶点活性

HMG-CoA reductase:8 nM

体外活性

方法：胃癌干细胞 MKN45 用 Atorvastatin hemicalcium salt (0.39-25 μM) 处理 7 天，通过 CellTiter-Glo luminescent assay 检测细胞增殖。 **结果：**Atorvastatin 以 2.1 μM 的 IC50 值剂量依赖性地抑制 MKN45 细胞的增殖。[1] **方法：**HUVECs 细胞用 Atorvastatin hemicalcium salt (0.7-35 μM) 处理 24 h，通过 Western Blot 检测靶点蛋白表达水平。 **结果：**35 μM Atorvastatin 治疗后，凋亡标志物 cleaved caspase-3 和 cleaved PARP-1 的蛋白表达水平在 HUVECs 中显著上调。[2]

体内活性

方法：为研究对动脉粥样硬化的作用，将 Atorvastatin hemicalcium salt (10 mg/kg) 灌胃给药给易损动脉粥样硬化斑块小鼠模型，每天一次，持续八周。 **结果：**Atorvastatin 在该剂量下没有降低血浆总胆固醇水平或影响斑块进展。然而，与对照组相比，Atorvastatin 治疗组的易损斑块数量显著减少。Atorvastatin 可以改善小鼠的斑块稳定性，而与血浆胆固醇水平无关。[3]

细胞实验

Briefly, SV-SMC from 5 different patients are seeded into 24-well cell culture plates at a density of 1×104? cells per well in full growth medium. Cells are incubated overnight and then quiesced in serum free medium for 3 days before transfer to full growth medium (10% FCS) containing 5 different statins (simvastatin, atorvastatin, fluvastatin, lovastatin, and pravastatin)at a range of concentrations. All statins are tested on cells from each individual patient. Medium and drugs are replaced after 2 days, and viable cell numbers are determined in triplicate wells after 4 days using Trypan Blue and a hemocytometer. The increase in cell number is calculated by subtracting the starting cell number (day 0) from the final cell number (day 4). Data are then normalized to control values (no statin) to correct for differences in proliferation rates between cells from different patients.

储存

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