For Research Use Only

SKF-96365 hydrochloride

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Catalog Number: CM03250

产品信息

Catalog Number:
CM03250

CAS号:
130495-35-1

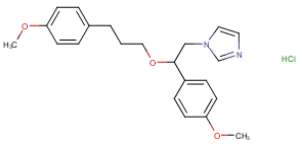
分子式:
$C_{22}H_{27}ClN_2O_3$

主要靶点:
Autophagy|Potassium Channel|Calcium Channel|TRP/TRPV Channel|Apoptosis

主要通路:
凋亡|代谢|离子通道|自噬

分子量:
402.91

溶解度:
DMSO:198.6 mM,H2O:198.6 mM



体外活性

SKF-96365 exhibits protective activity against MPP+ injury in PC12 cells and significantly inhibits apoptotic cell death in PC12 cells after MPP+ administration. SKF-96365 does not exert effects on necrotic cell death induced by MPP+ insult in PC12 cells. Because of its non-selective activity, SKF-96365 has been demonstrated to have effects on multiple other Ca2+ channels: it not only blocks high-voltage-activated (HVA) Ca2+ channels at typically utilized test concentrations, but also potently inhibits low-voltage -activated (LVA) T-type Ca2+ channels in HEK293 cells. The exact effect of SKF-96365 on intracellular calcium homeostasis might dependent on cell types and experimental models used[2].

体内活性

SKF-96365 treatment inhibited the calcium/calmodulin-dependent protein kinase II γ (CaMKII γ)/AKT signaling cascade in vitro and in vivo[4].

细胞实验

To investigate whether SKF-96365 could protect PC12 cells from injury induced by MPP+ insult, cultured PC12 cells are pretreated with SKF-96365 in different concentrations (1 µM, 10 µM or 50 µM) 30 min before MPP+ addition. The cells viability is measured 24 h after MPP+ insult by using the cell proliferation reagent WST-1. (Only for Reference)

描述

SKF-96365, a SOCE inhibitor, exhibits potent anti-neoplastic activity by inducing cell-cycle arrest and apoptosis in colorectal Y cells. SKF-96365 can induce cytoprotective autophagy to delay apoptosis by preventing the release of cytochrome c (cyt c) from the mitochondria into the cytoplasm. Mechanistically, SKF-96365 treatment inhibited the calcium/calmodulin-dependent protein kinase II γ (CaMKII γ)/AKT signaling cascade in vitro and in vivo. Overexpression of CaMKII γ or AKT abolished the effects of SKF-96365 on Y cells, suggesting a critical role of the CaMKII γ /AKT signaling pathway in SFK-96365-induced biological effects. SKF-96365 inhibited hERG current in a concentration-dependent manner.

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years