For Research Use Only

VO-Ohpic trihydrate

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Catalog Number: CM06229

产品信息

Catalog Number:
CM06229

CAS号:
476310-60-8

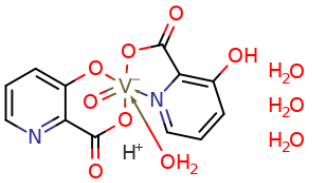
分子式:
$C_{12}H_9N_2O_8V \cdot 3H_2O \cdot H$

主要靶点:
PTEN|Autophagy

主要通路:
PI3K/Akt/mTOR 信号通路|自噬

分子量:
415.2

溶解度:
DMSO:4.15 mg/mL (10 mM);Ethanol:< 1 mg/mL (insoluble or slightly soluble);H2O:< 1 mg/mL (insoluble or slightly soluble)



靶点活性

PTEN:35 nM

体外活性

VO-OHpic is a potent small-molecule compound that specifically inhibits PTEN's cellular enzymatic activity, which in turn activates downstream targets such as Akt and FoxO3a. Glucose uptake into adipocytes is dramatically enhanced upon PTEN inhibition with VO-OHpic. PTEN inhibitor accelerates wound healing in fibroblasts[1]. VO-OHpic inhibits cell viability, cell proliferation and colony formation, and induces senescence-associated β-galactosidase activity in Hep3B (low PTEN expression) and to a lesser extent in PLC/PRF/5 (high PTEN expression) cells, but not in PTEN-negative SNU475 cells[2].

体内活性

VO-Ohpic significantly inhibits tumor growth in nude mice bearing xenografts of Hep3B cells[2]. VO-Ohpic administered to C57BL6 mice 30 minutes prior to Kcl-induced asystolic cardiac arrest significantly increases survival, LVPmax and dP/dt max with continued benefit. VO-OHpic also significantly increases lactate clearance and decreases plasma glucose level[3].

细胞实验

Cell proliferation is determined by estimating the amount of bromodeoxyuridine (BrdU) incorporation into DNA by a colorimetric immunoassay. 3×103 cells are cultured in 96-well plates with varying concentrations of VO-OHpic for 72 hours. BrdU is added 24 hours before the end of the treatments. Results are expressed as the percentage inhibition of BrdU incorporation over the control.(Only for Reference)

储存

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

For technical support and original validation data for this product please contact
T: 027-87531629 E: Proteintech-CN@ptglab.com W: ptgcn.com