Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

JPH203 Dihydrochloride

Catalog No: tcsc0035398

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1597402-27-1

Formula:
$C_{23}H_{21}Cl_4N_3O_4$

Pathway:
Autophagy

Target:
Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 105.5 mg/mL (193.49 mM)

Observed Molecular Weight:
545.24

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Product Description

JPH203 Dihydrochloride is a tyrosine analog, acts as a selective inhibitor of L-type amino acid transporter 1 (**LAT1**), and is used in cancer research.

IC50 & Target: LAT1[1]

In Vitro: JPH203 Dihydrochloride is a selective inhibitor of LAT1. JPH203 (KYT-0353) inhibits ^{14}C-leucine uptake in S2-hLAT1 and HT-29 cells, with IC_{50}s of 0.14 μM and 0.06 μM. JPH203 (3-1000 μM) exhibits concentration-dependent inhibitory effects on S2-hLAT1 cell growth with an IC_{50} of 16.4 μM. JPH203 also displays inhibitory activities against HT-29 cell growth, with an IC_{50} value of 4.1 μM [1]. JPH203 (0.001-100 μM) inhibits the ^{14}C-leucine (1.0 μM) uptake in a concentration dependent way by the YD-38 cells with an IC_{50} value of 0.79 ± 0.06 μM. JPH203 slightly shows such effects in normal human oral keratinocytes (NHOKs). JPH203 (0.01-30 mM, 1-4 d) completely inhibits the proliferation of YD-38 cells in a dose- and time-dependent manner. However, JPH203 slightly inhibits the proliferation of NHOKs. JPH203 (30 mM) induces apoptosis of YD-38 cells. JPH203 (3 mM) also increases the level of cleaved PARP in activation of the caspases cascade[2]. JPH203 (30 mM) induces mitochondria-dependent apoptosis in Saos2 human osteosarcoma cells. JPH203 (0.001-100 μM) inhibits ^{14}C-leucine (1.0 μM) uptake slightly in FOB cells with an IC_{50} value of 92.12 ± 10.71 μM, but potently exihibts such effects in Saos2 cells with an IC_{50} value of 1.31 ± 0.27 μM. JPH203 (0.01 to 30 mM, 1-4 d) potently inhibits cell proliferation in Saos2 cells in a dose- and time-dependent manner, with an IC_{50} of 4.09-0.09 mM, but slightly inhibits that of FOB cells, with an IC_{50} of 24.1-2.8 mM[3].

In Vivo: JPH203 (6.3, 12.5, and 25.0 mg/kg, i.v. for 14 days) exhibits dose-dependent inhibition on HT-29 tumor growth in nude mice [1].