

# 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 :  $\geq 105.5$  mg/mL (193.49 mM)

**Observed Molecular Weight:**

545.24

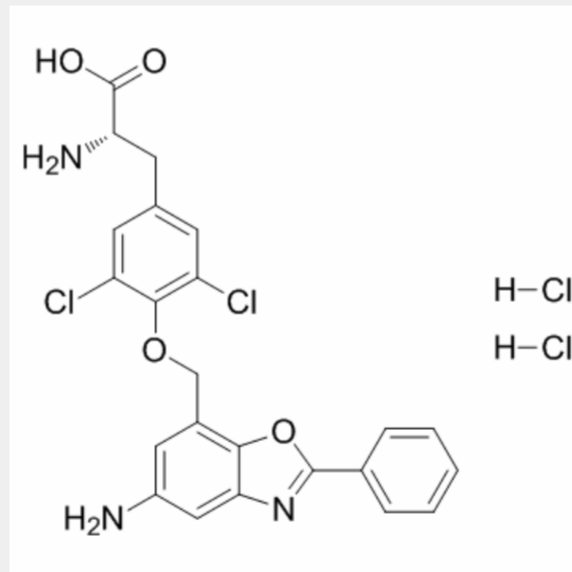
## Product Description

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.

IC<sub>50</sub> & Target: LAT1<sup>[1]</sup>

**In Vitro:** JPH203 Dihydrochloride is a selective inhibitor of LAT1. JPH203 (KYT-0353) inhibits <sup>14</sup>C-leucine uptake in S2-hLAT1 and HT-29 cells, with IC<sub>50</sub>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<sub>50</sub> of 16.4 μM. JPH203 also displays inhibitory activities against HT-29 cell growth, with an IC<sub>50</sub> value of 4.1 μM<sup>[1]</sup>. JPH203 (0.001-100 μM) inhibits the <sup>14</sup>C-leucine (1.0 μM) uptake in a concentration dependent way by the YD-38 cells with an IC<sub>50</sub> 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<sup>[2]</sup>. JPH203 (30 mM) induces mitochondria-dependent apoptosis in Saos2 human osteosarcoma cells. JPH203 (0.001-100 μM) inhibits <sup>14</sup>C-leucine (1.0 μM) uptake slightly in FOB cells with an IC<sub>50</sub> value of 92.12 ± 10.71 μM, but potently exhibits such effects in Saos2 cells with an IC<sub>50</sub> 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<sub>50</sub> of 4.09-0.09 mM, but slightly inhibits that of FOB cells, with an IC<sub>50</sub> of 24.1-2.8 mM<sup>[3]</sup>.

**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<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!