

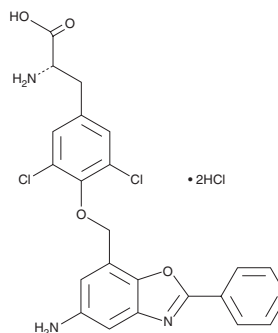
# PRODUCT INFORMATION



## JPH203 (hydrochloride)

Item No. 36053

**CAS Registry No.:** 1597402-27-1  
**Formal Name:** O-[(5-amino-2-phenyl-7-benzoxazolyl)methyl]-3,5-dichloro-L-tyrosine, dihydrochloride  
**Synonym:** KYT-0353  
**MF:** C<sub>23</sub>H<sub>19</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>4</sub> • 2HCl  
**FW:** 545.2  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

JPH203 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the JPH203 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. JPH203 (hydrochloride) is slightly soluble in ethanol, DMSO and dimethyl formamide.

### Description

JPH203 is an inhibitor of L-type amino acid transporter 1 (LAT1; IC<sub>50</sub> = 0.14 μM for <sup>14</sup>C-leucine uptake in S2 cells expressing the human transporter).<sup>1</sup> It is selective for LAT1 over LAT2 (IC<sub>50</sub> = >10 μM). JPH203 inhibits <sup>14</sup>C-leucine uptake by, and growth of, HT-29 cells (IC<sub>50</sub>s = 0.06 and 4.1 μM, respectively). It induces apoptosis and increases levels of cleaved caspase-3, caspase-7, caspase-9, and poly(ADP-ribose) polymerase (PARP) in YD-38 oral cancer cells when used at a concentration of 3 mM.<sup>2</sup> JPH203 (6.3, 12.5, and 25 mg/kg) reduces tumor growth in an HT-29 mouse xenograft model.<sup>1</sup>

### References

- Oda, K., Hosoda, N., Endo, H., *et al.* L-type amino acid transporter 1 inhibitors inhibit tumor cell growth. *Cancer Sci.* **101**(1), 173-179 (2010).
- Yun, D.-W., Lee, S.A., Park, M.-G., *et al.* JPH203, an L-type amino acid transporter 1-selective compound, induces apoptosis of YD-38 human oral cancer cells. *J. Pharmacol. Sci.* **124**(2), 208-217 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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