

Data Sheet

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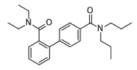
Product Name : WC522 Cat. No. : PC-24367

CAS No. :

Molecular Formula: C₂₄H₃₂N₂O₂
Molecular Weight: 380.53

Target: Dishevelled

Solubility: 10 mM in DMSO



Biological Activity

WC522 is a selective small molecule inhibitor of **Dvl2-PDZ-cholesterol** interaction, effectively suppresses both **Wnt**-independent and Wnt-stimulated β -catenin signaling activity in Dvl2-expressing APC-truncated CRC cells.

WC522 occupies the region where Dvl2-PDZ interacts with cholesterol molecules in the membrane.

WC522B (biotinylated derivative of WC522) captured Dvl2 but not Dvl1 and Dvl3 in both HCT15 and HCT116 cells WC522 dose-dependently inhibits HCT15 cell viability and induces cell apoptosis.

WC522 potently inhibits β -catenin stability and β -catenin transcriptional activity in HCT15 and Caco2 cells, WC522 also suppresses β -catenin signaling in DLD1 and LOVO cells.

WC522 is effective against all Dvl-expressing APC-truncated CRC cells regardless of the length of the truncated APC. WC522 blocks cell proliferation of APC-truncated CRC cells, with little to no antiproliferative effect against normal colon epithelial (CCD-18Co) cells, induces apoptosis of APC-truncated CRC cells.

WC522 (200 mg/kg, subcutaneous injection) blocks CRC tumors HCT15 xenografts in mice and effectively suppresses the level of active β -catenin, does not inhibit tumor growth of Dvl2-KO HCT15 xenografts.

References

Sharma A, et al. *Nat Chem Biol*. 2025 Apr 16. doi: 10.1038/s41589-025-01870-y.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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