Open Peer Review on Qeios

Porcupine Inhibitor ETC-1922159

National Cancer Institute

Source

National Cancer Institute. <u>Porcupine Inhibitor ETC-1922159</u>. NCI Thesaurus. Code C123830.

An orally bioavailable inhibitor of the membrane-bound O-acyltransferase (MBOAT) porcupine (PORCN), with potential antineoplastic activity. Upon oral administration, ET C-1922159 binds to and inhibits PORCN in the endoplasmic reticulum (ER), which blocks post-translational palmitoylation of Wnt ligands and inhibits their secretion. This prevents the activation of Wnt ligands, interferes with Wnt-mediated signaling, and inhibits cell growth in Wnt-driven tumors. Porcupine catalyzes the palmitoylation of Wnt ligands, and plays a key role in Wnt ligand secretion. Wnt signaling is dysregulated in a variety of cancers.