SMO Protein Inhibitor ZSP1602

National Cancer Institute

Source

An orally bioavailable small molecule SMO (Smoothened) inhibitor with potential antineoplastic activity. SMO inhibitor BMS-833923 inhibits the sonic hedgehog (SHH) pathway protein SMO, which may result in a suppression of the SHH signaling pathway. SMO is a G-protein coupled receptor that lies just downstream of the SHH ligand cell surface receptor Patched-1 in the SHH pathway; in the absence of ligand Patched-1 inhibits SMO and ligand binding to Patched-1 results in increased levels of SMO. The SHH signaling pathway plays an important role in cellular growth, differentiation and repair; constitutive activation of this pathway is associated with uncontrolled cellular proliferation and has been observed in a variety of cancers.