Cat No. 17-G94

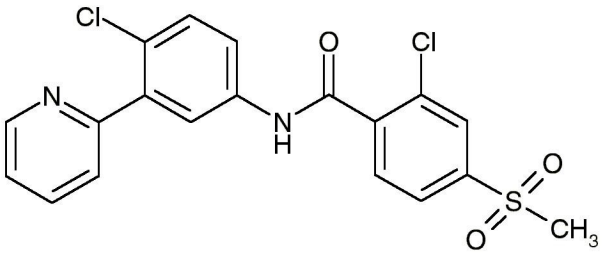
GDC0449 (Vismodegib)

5 mg

For research purposes only

GDC0449 is a potent hedgehog (Hh) signaling pathway inhibitor with an IC_{50} of 3nM. The Hedgehog signaling pathway plays an important role in tissue growth and repair. GDC0449 works by blocking the activities of the Hedgehog-ligand cell surface receptors PTCH or SMO and suppresses Hedgehog signaling. It has been shown to inhibit the growth of primary pancreatic xenographs without non-specifically inhibiting pancreatic cell proliferation *in vitro*. GDC0449 has also been shown to inhibit ABCG2, Pgp, and MRP1-important ABC transporters associated with MDR. It has also been used to treat medullablastoma in animal models.

TECHNICAL INFORMATION



Other Names: GDC-0449, Vismodegib, HhAntag691

Chemical Formula: $C_{19}H_{14}Cl_2N_2O_3S$

CAS Number: 879085-55-9

Molecular Weight: 421.30

Purity: >99%

Appearance: crystalline solid

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO at 200mg/ml. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.

REFERENCES

1. Rudin et al. (2009) Treatment of medulloblastoma with hedgehog pathway inhibitor GDC-0449. N Engl J Med. 361(12):1173-8.
2. Zhang et al. (2009) Hedgehog pathway inhibitor HhAntag691 is a potent inhibitor of ABCG2/BCRP and ABCB1/Pgp. Neoplasia. 11(1):96-101.
3. Giannetti et al. (2011) Identification, characterization, and implications of species-dependent plasma protein binding for the oral Hedgehog pathway inhibitor vismodegib (GDC-0449). J Med Chem. 54(8):2592-601.