Cat No. 78-S14

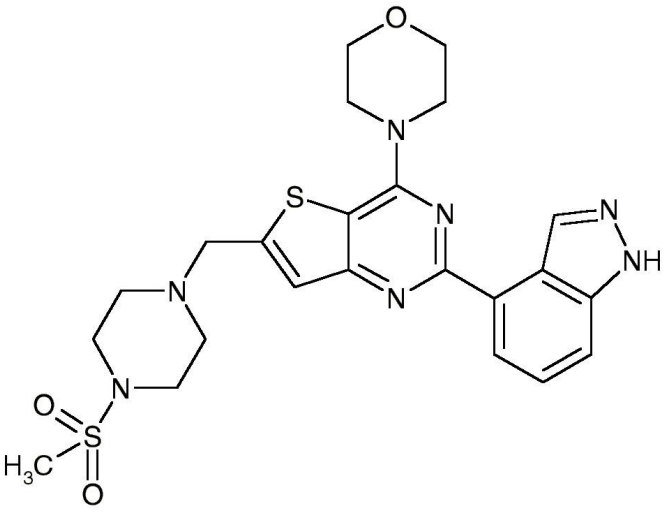
GDC0941

5 mg

For research purposes only

GDC0941 is a phosphatidylinositol 3-kinase (P13K) inhibitor. It has been shown to have antitumor activity in preclinical models of breast cancer. GDC-0941 inhibits the activity of recombinant PI3K *in vitro* with IC50's of 0.003 µM (P110α), 0.033 µM (P110β), 0.003 µM (P110δ), 0.075 µM (P110γ), 0.58 µM (mTOR) and 1.23 µM (DNA-PK).

TECHNICAL INFORMATION



Other Names: 2-(1H-Indazol-4-yl)-6-[[4-(methylsulfonyl)-1-piperazinyl]methyl]-4-(4-morpholinyl)-thieno[3,2- d]pyrimidine

Chemical Formula: $C_{23}H_{27}N_7O_3S_2$

CAS Number: 957054-30-7

Molecular Weight: 513.64

Purity: >98%

Appearance: a 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 66mg/ml. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.

REFERENCES

1. Folkes et al. (2008) The identification of 2-(1H-indazol-4-yl)-6-(4-methanesulfonyl-piperazin-1-ylmethyl)-4-morpholin-4-yl-thieno[3,2-d]pyrimidine (GDC-0941) as a potent, selective, orally bioavailable inhibitor of class I PI3 kinase for the treatment of cancer. J Med Chem. 51(18):5522-32.
2. Junttila et al. (2009) Ligand-independent HER2/HER3/PI3K complex is disrupted by trastuzumab and is effectively inhibited by the PI3K inhibitor GDC-0941. Cancer Cell. 15(5):429-40.
3. Raynaud et al. (2009) Biological properties of potent inhibitors of class I phosphatidylinositide 3-kinases: from PI-103 through PI-540, PI-620 to the oral agent GDC-0941. Mol Cancer Ther. 8(7):1725-38.