Cat No. 86-M73

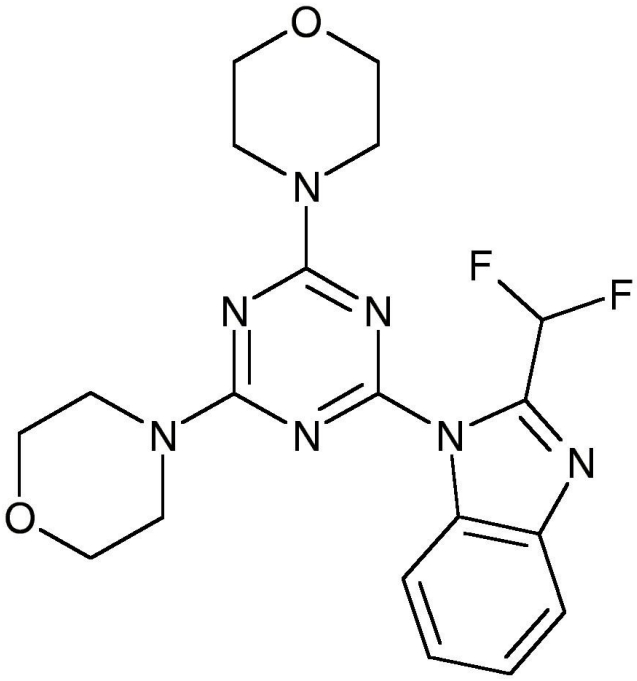
ZSTK474

50 mg

For research purposes only

ZSTK474 is a cell permeable and reversible P13K inhibitor with an IC_{50} at 6nm. It was identified as part of a screening library, selected for its ability to block tumor cell growth. ZSTK474 has shown strong antitumor activities against human cancer xenographs when administered orally to mice without a significant toxic effect.

TECHNICAL INFORMATION



Other Names: ZSTK-474

Chemical Formula: $C_{19}H_{21}F_2N_7O_2$

CAS Number: 475110-96-4

Molecular Weight: 417.41

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

REFERENCES

1. Yaguchi et al. (2006) Antitumor activity of ZSTK474, a new phosphatidylinositol 3-kinase inhibitor. J Natl Cancer Inst. 98(8):545-56.
2. Kong et al. (2009) Antiangiogenic effect of ZSTK474, a novel phosphatidylinositol 3-kinase inhibitor. Eur J Cancer. 45(5):857-65.
3. Dan et al. (2011) ZSTK474, a specific phosphatidylinositol 3-kinase inhibitor, induces G1 arrest of the cell cycle in vivo. Eur J Cancer. Nov 14. Epub ahead of print.
4. Rewcastle et al. (2011) Synthesis and Biological Evaluation of Novel Analogues of the Pan Class I Phosphatidylinositol 3-Kinase (PI3K) Inhibitor 2-(Difluoromethyl)-1-[4,6-di(4-morpholinyl)-1,3,5-triazin-2-yl]-1H-benzimidazole (ZSTK474). J Med Chem. 54(20): 7105-26.