Cat No. 29-E58

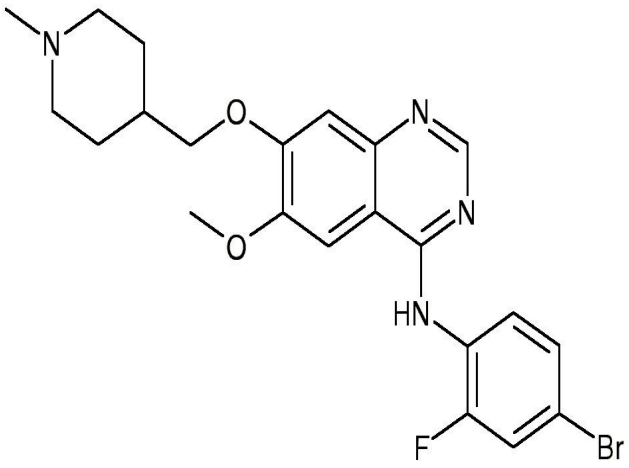
Vandetanib

50 mg

For research purposes only

Vandetanib is a VEGFR and EGFR antagonist and a tyrosine kinase inhibitor. It has been shown to inhibit VEGFR-dependent tumor angiogenesis and EGFR– and RET-dependent tumor cell proliferation and survival. Vandetanib has also been shown to inhibt fms-like tyrosine kinase 4 (VEGFR3, IC50 = 110 nM) and epidermal growth factor receptor (EGFR/HER1, IC50 = 500 nM) but shows selectivity relating to a range of other tyrosine and serine-threonine kinases.

TECHNICAL INFORMATION



Other Names: Caprelsa, Zactima, ZD6474

Chemical Formula: $C_{22}H_{24}BrFN_4O_2$

CAS Number: 443913-73-3

Molecular Weight: 475.35

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 30 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. Wedge et al. (2002) ZD6474 inhibits vascular endothelial growth factor signaling, angiogenesis, and tumor growth following oral administration. Cancer Res. 62(16):4645-55.
2. Yoshikawa et al. (2009) Vandetanib (ZD6474), an inhibitor of VEGFR and EGFR signalling, as a novel molecular-targeted therapy against cholangiocarcinoma. Br J Cancer. 100(8):1257-66.
3. Sarkar et al. (2010) ZD6474, a dual tyrosine kinase inhibitor of EGFR and VEGFR-2, inhibits MAPK/ERK and AKT/PI3-K and induces apoptosis in breast cancer cells. Cancer Biol Ther. 9(8):592-603.