

Cat No. 50-P44



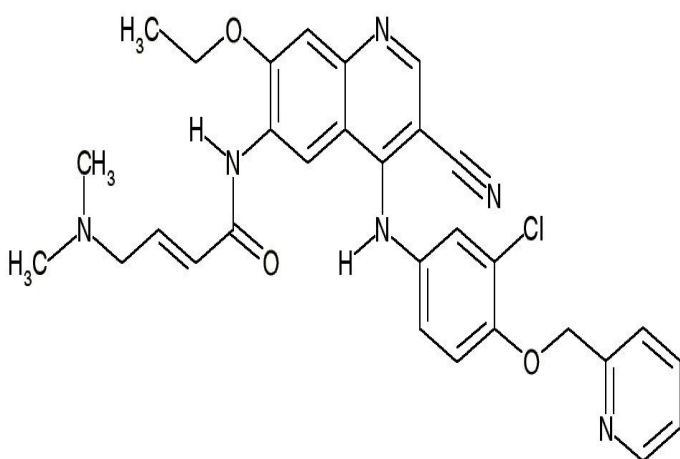
Neratinib

5 mg

For research purposes only

Neratinib, also known as HKI-272, is a second-generation inhibitor of the ErbB family of receptor kinases. Neratinib is an irreversible inhibitor of the epidermal growth factor receptor (EGFR) and human epidermal growth factor receptor 2 (HER-2) tyrosine kinases by targeting a cysteine residue in the ATP-binding site of the receptor. Neratinib has been shown to inhibit the proliferation of HER-2 overexpressing human breast cancer cell lines and EGFR-dependent cells *in vitro*. *In vivo*, Neratinib has been shown to be active against HER-2- and EGFR-dependent tumor xenograft models.

TECHNICAL INFORMATION



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

Other Names: HKI-272

Chemical Formula: C₃₀H₂₉ClN₆O₃

CAS Number: 698387-09-6

Molecular Weight: 557.04

Purity: >98%

Appearance: a crystalline solid

Solubility: DMSO

REFERENCES

1. Sequist LV. (2007) Second-generation epidermal growth factor receptor tyrosine kinase inhibitors in non-small cell lung cancer. *Oncologist*. 12(3):325-30.
2. Rabindran et al. (2004) Antitumor activity of HKI-272, an orally active, irreversible inhibitor of the HER-2 tyrosine kinase. *Cancer Res*. 64(11):3958-65.
3. Li et al. (2007) Bronchial and peripheral murine lung carcinomas induced by T790M-L858R mutant EGFR respond to HKI-272 and rapamycin combination therapy. *Cancer Cell*. 12(1):81-93.