

Product Name	: Neratinib
Synonyms	: HKI-272; HKI272; HKI 272
Cat No.	: M15679
CAS Number	: 698387-09-6
Molecular Formula	: C ₃₀ H ₂₉ ClN ₆ O ₃
Formula Weight	: 557.04
Chemical Name	: 2-Butenamide, N-[4-[[3-chloro-4-(2-pyridinylmethoxy)phenyl]amino]-3-cyano-7-ethoxy-6-quinolinyl]-4-(dimethylamino)-, (2E)-
Description	A potent, highly selective, irreversible HER2 and EGFR inhibitor with IC₅₀ of 59 nM and 92 nM in cell-free assays; weakly inhibits KDR and Src (IC₅₀=0.8 and 1.4 uM), no significant inhibition to Akt, CDK1/2/4, IKK-2, MK-2, PDK1, c-Raf and c-Met; inhibits downstream signal transduction events and cell cycle regulatory pathways, leads to arrest at the G(1)-S phase transition, decreases cell proliferation; active in HER-2- and EGFR-dependent tumor xenograft models, orally bioavailable. Breast Cancer Approved
Pathway	: Angiogenesis
Target	: EGFR
Receptor	: EGFR; HER2; PDK1; Src; VEGFR2(KDR)
Solubility	: DMSO: 6.4 mg/mL (Need ultrasonic)
SMILES	: <chem>CCOC1=C(C=C2C(=C1)N=CC(=C2NC3=CC(=C(C=C3)OCC4=CC=CC=N4)Cl)C#N)NC(=O)/C=C/CN(C)C</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Rabindran SK, et al. Cancer Res. 2004 Jun 1;64(11):3958-65. | 2. Tsou HR, et al. J Med Chem. 2005 Feb 24;48(4):1107-31. | 3. Ji H, et al. Proc Natl Acad Sci U S A. 2006 May 16;103(20):7817-22.