

# Neratinib

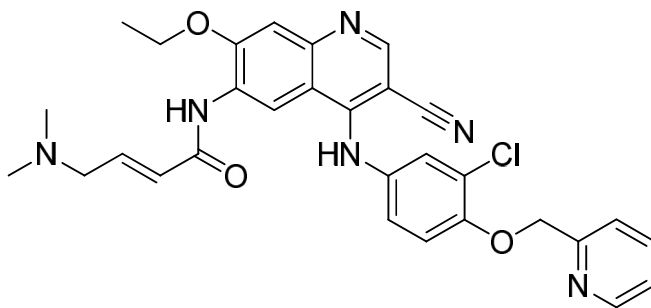
SYN-1140

(E)-N-(4-(3-chloro-4-(pyridin-2-ylmethoxy)phenylamino)-3-cyano-7-ethoxyquinolin-6-yl)-4-(dimethylamino)but-2-enamide

CAS Registry No.: 698387-09-6

**Smiles String:**

CCOC1=C(NC(/C=C/CN(C)C)=O)C=C(C(NC2=CC=C(OCC3=NC=CC=C3)C(Cl)=C2)=C(C#N)C=N4)C4=C1



Molecular Weight: 557.04

Molecular Formula: C<sub>30</sub>H<sub>29</sub>ClN<sub>6</sub>O<sub>3</sub>

Lot Number: Refer to vial

<sup>1</sup>H-NMR: Available on request

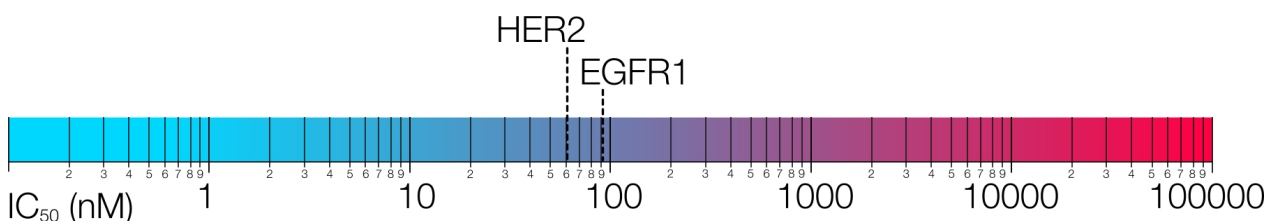
HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

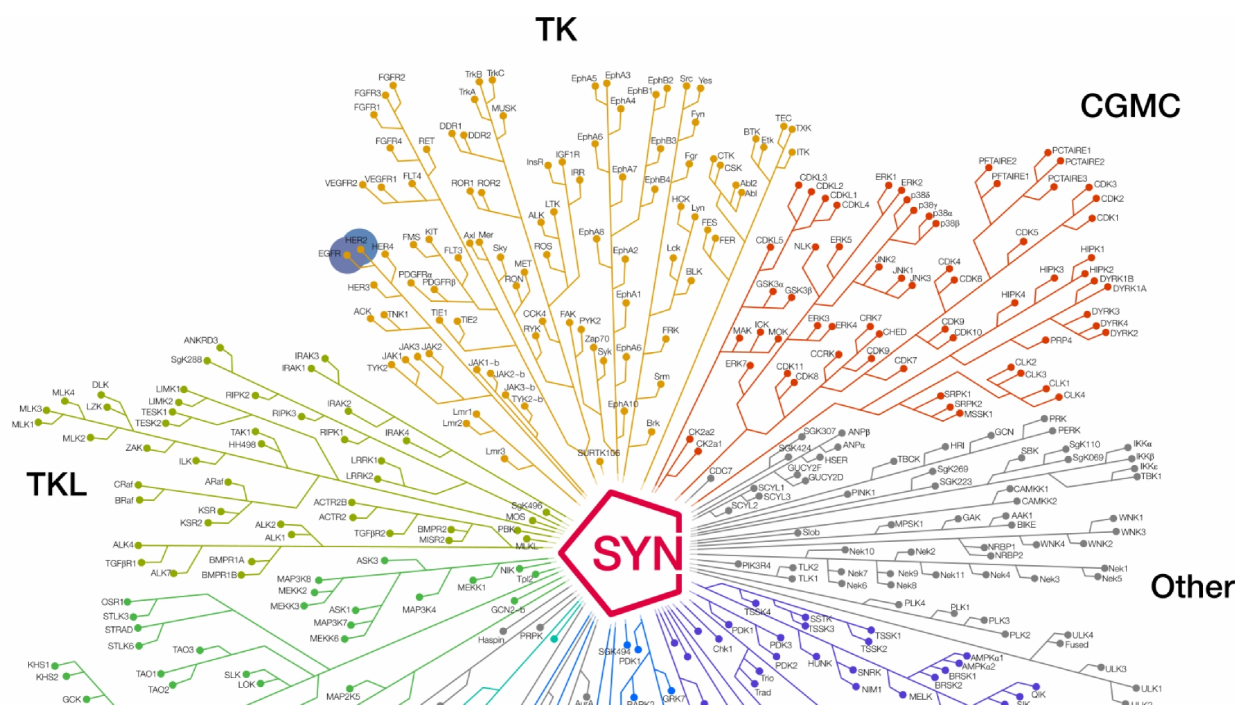
## Description:

Neratinib (HKI-272) is an orally available, irreversible tyrosine kinase inhibitor with IC<sub>50</sub> values of 59 nM and 92 nM for HER2 and EGFR, respectively. It is in development for the treatment of early- and late-stage HER2-positive breast cancer.

## Biological Activity



## Kinome Mapping



## Shipping and Storage Temperature

**Shipping:**  
Ambient

**Storage:**  
2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

## Solubility

DMSO 2 mg/mL, Ethanol <1 mg/mL

## Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.5570	5.5704	11.1408	27.8520

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## References

1. Rabindran SK, Discafani CM, Rosfjord EC, Baxter M, Floyd MB, Golas J, Hallett WA, Johnson BD, Nilakantan R, Overbeek E, Reich MF, Shen R, Shi X, Tsou HR, Wang YF, Wissner A. Antitumor activity of HKI-272, an orally active, irreversible inhibitor of the HER-2 tyrosine kinase. *Cancer Res.* 2004 Jun 1;64(11):3958-65.

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## Ordering Information

To order more of this or any other SYNkinase compound, go to [synkinase.com](http://synkinase.com), Call us Toll Free (US Only) at 1- 877-854-6273 or email [orders@synkinase.com](mailto:orders@synkinase.com).

Product Datasheet (Rev. 1.1)