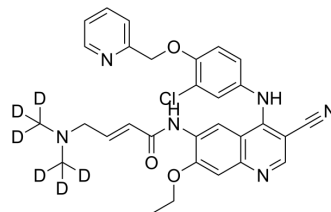


## Neratinib-d<sub>6</sub>

Cat. No.:	HY-32721S
CAS No.:	1259519-18-0
Molecular Formula:	C <sub>30</sub> H <sub>23</sub> D <sub>6</sub> ClN <sub>6</sub> O <sub>3</sub>
Molecular Weight:	563.08
Target:	EGFR
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Neratinib-d <sub>6</sub> (HKI-272-d6) is the deuterium labeled Neratinib. Neratinib (HKI-272) is an orally available, irreversible tyrosine kinase inhibitor with IC <sub>50</sub> s of 59 nM and 92 nM for HER2 and EGFR, respectively.
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Rabindran SK, et al. Antitumor activity of HKI-272, an orally active, irreversible inhibitor of the HER-2 tyrosine kinase. *Cancer Res*, 2004, 64(11), 3958-3965.
- [3]. Yoshioka T, et al. Antitumor activity of pan-HER inhibitors in HER2-positive gastric cancer. *Cancer Sci.* 2018 Apr;109(4):1166-1176.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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