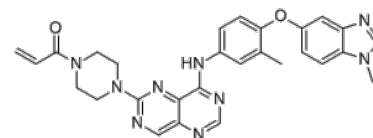


**Product Name** : BI-4142  
**Cat. No.** : PC-49226  
**CAS No.** : 2682003-36-5  
**Molecular Formula** : C<sub>28</sub>H<sub>27</sub>N<sub>9</sub>O<sub>2</sub>  
**Molecular Weight** : 521.57  
**Target** : EGFR  
**Solubility** : 10 mM in DMSO



## Biological Activity

BI-4142 (BI 4142) is a potent, selective, covalent and orally active **HER2** inhibitor with IC<sub>50</sub> of 5 nM, potently inhibits HER2 exon 20 mutants while sparing WT EGFR.

BI-4142 (5 uM) inhibits the proliferation of HER2-dependent cell lines with IC<sub>50</sub> values of 10 nM, 18 nM, 270 nM and 2400 nM against HEK HER2YVMA, Ba/F3 HER2YVMA, HEK EGFRWT and Ba/F3 EGFRWT, respectively.

BI-4142 dose-dependently decreases pHER2 and pERK levels in NCI-H2170 HER2YVMA and PC-9 HER2YVMA cells.

BI-4142 inhibits tumor growth and inhibits oncogenic signaling in preclinical xenograft models of HER2 exon 20 mutant non-small cell lung cancer.

## References

To C, et al. *Nat Cancer*. 2022 Apr;3(4):402-417.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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