

Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 ASK120067

 Cat. No.
 :
 PC-38347

 CAS No.
 :
 1934259-00-3

 Molecular Formula
 :
 C₂₉H₃₂CIN₇O₂

 Molecular Weight
 :
 546.072

Target : EGFR
Solubility : 10 mM in DMSO

Biological Activity

ASK120067 (Limertinib) is a novel third-generation inhibitor of **EGFR T790M** (L858R/T790M IC50=0.3 nM, T790M IC50=0.5 nM), with selectivity over EGFR WT (IC50=6 nM).

ASK120067 potently inhibited the EGFR L858R/T790M and EGFR T790M resistant mutants, with IC50 of 0.3 nM and 0.5 nM, respectively, as well as the EGFR exon19del sensitizing mutant (IC50 = 0.5 nM).

ASK120067 also displayed a favorable selectivity profile against a panel of 258 kinases.

ASK120067 selectively inhibits the growth of EGFR-mutant cell lines and induces apoptosis, with IC50 values of 12 nM, 6 nM and 2 nM against NCI-H1975, PC-9, and HCC827 cells, respectively.

ASK120067 dose-dependently inhibited EGF-induced EGFR L858R/T790M phosphorylation and consequent activation of the downstream molecules AKT and ERK in NCI-H1975 cells, with similar or even more effective potency than osimertinib. ASK120067 (5, 10 mg/kg once daily) demonstrated profound and selective antitumor efficacy in EGFR-mutant xenograft models in vivo.

References

Zhang T, et al. *Mol Cancer*. 2020 May 13;19(1):90.

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

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