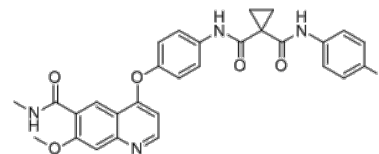


Product Name : XL092
Cat. No. : PC-49513
CAS No. : 2367004-54-2
Molecular Formula : C₂₉H₂₅FN₄O₅
Molecular Weight : 528.54
Target : c-Met (HGFR)
Solubility : 10 mM in DMSO



Biological Activity

XL092 (Zanzalitinib, XL-092) is a novel small molecule **multi-receptor tyrosine kinase (RTK)** inhibitor, targets **MET** (IC₅₀=3.0 nM), VEGFR2 (IC₅₀=15.0 nM), and the TAM kinases TYRO3, AXL (IC₅₀=5.8 nM), and MER (IC₅₀=0.6 nM). XL092 exhibits ≥70% inhibition of additional RTKs and TKs in profiling a panel of 405 protein kinases at a single concentration of 1 μM, shows no activity against serine/threonine kinases.

XL092 inhibited auto-phosphorylation of MET (PC-3 and Hs 746T cells), AXL (A-172 cells), VEGFR2 (HUVEC), MER (transfected

293A cells), and TYRO3 (transfected 293A cells) with IC₅₀ ranging from 1.6 nM (VEGFR2) to 306 nM (TYRO3).

XL092 reduced the proliferation of several human tumor cell lines, including SNU-5 cells (IC₅₀ 98.9 nM), which harbor an amplification of the MET gene, and HUVEC cells (IC₅₀ 10.4 nM).

XL092 caused a dose-dependent decrease in the phosphorylation of MET in SNU-5 tumors in vivo, plasma concentrations of XL092 in the range of 1.9-7.6 μM resulted in 26%-67% inhibition of MET phosphorylation in the SNU-5 xenografts.

XL092 robustly inhibited the phosphorylation of MET and AXL in Hs 746T tumors.

XL092 promoted M2 to M1 repolarization of macrophages in vitro and inhibited primary human macrophage efferocytosis in a dose-dependent manner.

XL092 inhibits tumor growth in vivo in a dose-dependent manner in four different human xenograft murine models using the NCI-H441, Hs 746T, SNU-5, and MDA-MB-231 cell lines.

XL092 enhanced tumor growth inhibition in combination with immune checkpoint inhibitors (ICIs).

References

Jeff Hsu, et al. *Mol Cancer Ther.* 2022 Nov 18;MCT-22-0262.

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

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