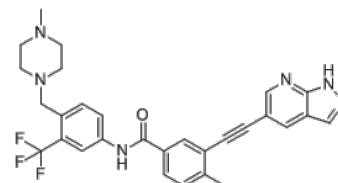


Product Name : Olverembatinib
Cat. No. : PC-38306
CAS No. : 1257628-77-5
Molecular Formula : C₂₉H₂₇F₃N₆O
Molecular Weight : 532.22
Target : Bcr-Abl
Solubility : 10 mM in DMSO



Biological Activity

Olverembatinib (HQP1351, GZD824) is an orally bioavailable **multikinase inhibitor** targeting a broad spectrum of mutant **KIT** kinases (KIT-V559D IC₅₀=1.4 nM).

Olverembatinib (HQP1351, GZD824) also inhibits Bcr-Abl (WT) and Bcr-Abl (T315I) with IC₅₀ of 0.34 nM and 0.68 nM, respectively.

Olverembatinib (HQP1351, GZD824) strongly inhibited wild-type KIT kinase and KIT kinases with primary mutations within exon 11 (L576P and V559D), with an inhibition rate of over 90% at 10 nM.

Olverembatinib (HQP1351, GZD824) showed strong inhibitory effect on KIT kinase with secondary mutations in the ATP-binding pocket (V559D/T670I and V559D/V654A).

The inhibition rates on KIT with A-loop mutations (A829P, D816H and D816 V) were relatively weaker at 10 nM (20–40%).

Olverembatinib (HQP1351, GZD824) exhibited potent binding affinities to additional kinases at 10 nM, including BRAF (V600E), DDR1, FLT3, PDGFRB, RET (M918T), TAK1 and TIE2.

Olverembatinib (HQP1351, GZD824) shows antiproliferative activity in GIST cells with KIT mutations (GIST T1 cells IC₅₀=27 nM), inhibits colony formation, cell migration and invasion, induces cell cycle arrest and cell apoptosis, regulates KIT oncogenic signaling proteins in vitro.

Olverembatinib (HQP1351, GZD824) exhibits antitumor activity in GIST xenograft models in vivo. Olverembatinib (HQP1351) also is a potent Omicron NTD-mediated cytokine release inhibitor.

References

Liu X, et al. *Cell Biosci.* 2019 Oct 26;9:88.

Fang DD, et al. *Transl Oncol.* 2022 Jan;15(1):101244.

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

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