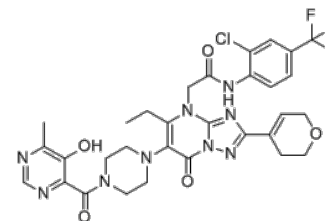


Product Name	: HRO761
Cat. No.	: PC-20674
CAS No.	: 2869954-34-5
Molecular Formula	: C ₃₁ H ₃₁ ClF ₃ N ₉ O ₅
Molecular Weight	: 702.09
Target	: DNA Repair Protein
Solubility	: 10 mM in DMSO



CAS: 2869954-34-5

Biological Activity

HRO761 (HRO-761) is the first potent and selective, allosteric inhibitor of RecQ DNA helicase **WRN** with IC₅₀ of 50 nM, shows potent and selective anti-tumor activity in cancers with microsatellite instability.

HRO761 binds at the interface of the D1 and D2 helicase domains, locking WRN in an inactive conformation.

Pharmacological inhibition of WRN by HRO761 recapitulates the phenotype observed by WRN genetic suppression, leading to activation of the DNA damage response and inhibition of tumor cell growth selectively in microsatellite instability (MSI) but not in MSS cells.

HRO761 activates a p53-related response, anti-proliferative effects were observed in both p53 wild-type as well as p53 null or mutated tumor cells.

HRO761 treatment results in dose-dependent in vivo DNA damage induction and tumor growth inhibition in MSI cell- and patient-derived xenograft models.

References

Patent WO2022249060 (Example 42).

2. Ferretti S, et al. *Nature*. 2024 Apr 24. doi: 10.1038/s41586-024-07350-y.

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

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