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Data Sheet

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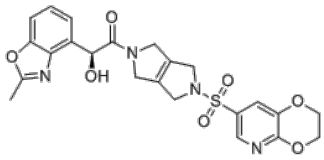
Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name : FT709
Cat. No. : PC-38692
CAS No. : 2413991-74-7
Molecular Formula : $C_{23}H_{22}N_4O_7S$
Molecular Weight : 498.510
Target : Deubiquitinase (DUB)
Solubility : 10 mM in DMSO



Biological Activity

FT709 is a potent, highly selective **USP9X** inhibitor with IC50 of 82 nM in biochemical assays, reduces CEP55 expression in BxPC3 pancreatic cancer cells with IC50 of 131 nM.
FT709 is inactive across a panel of 20 deubiquitylases (DUBs) in a biochemical assay (IC50 values >25 uM), shows vastly improved specificity over the compound WP1130.
FT709 competes with an active site probe (HA-UbC2Br) with an IC50 of 0.5 uM and 5 uM when applied to MCF7 breast cancer cell extracts and to intact MCF7 cells, respectively.
Acute inhibition with FT709 recapitulates gene deletion of USP9X in HCT116 cells, depletes ZNF598 and MKRN2 protein levels, and impairs the ribosomal stalling response.
FT709 is a highly specific USP9X tool compound inhibitor will enable further enquiry into pathways previously linked to USP9X, which should now include global profiling of protein translation.

References

Anne Clancy, et al. ***J Cell Biol.*** 2021 Mar 1;220(3):e202004211.

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

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