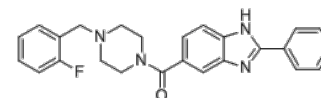


Product Name : Bractoppin
Cat. No. : PC-63244
CAS No. : 2290527-07-8
Molecular Formula : C₂₅H₂₃FN₄O
Molecular Weight : 414.484
Target : Other Targets
Solubility :



Biological Activity

Bractoppin is a potent, small-molecule chemical inhibitor that specific selectively blocks phosphopeptide recognition by the BRCA1 tBRCT domain with binding IC₅₀ of 74 nM; shows no inhibition for recognition of cognate biotinylated phosphopeptides to the TOPBP1 tBRCT 7/8, or GRB2 SH2 proteins; engages BRCA1 tBRCT residues recognizing pSer in the consensus motif, pSer-Pro-Thr-Phe, plus an abutting hydrophobic pocket; inhibits substrate recognition detected by Förster resonance energy transfer, and diminishes BRCA1 recruitment to DNA breaks, in turn suppressing damage-induced G2 arrest and assembly of the recombinase, RAD51; selectively interrupts BRCA1 tBRCT-dependent signals evoked by DNA damage.

References

Periasamy J, et al. *Cell Chem Biol.* 2018 Mar 9. pii: S2451-9456(18)30076-X.

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

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