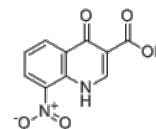


Product Name : NSC 15765
Cat. No. : PC-61784
CAS No. : 35973-25-2
Molecular Formula : C₁₀H₆N₂O₅
Molecular Weight : 234.167
Target : Other Targets
Solubility : 10 mM in DMSO



2. Li Z, et al. *EMBO J.* 2018 Jul 13;37(14). pii: e96729.

Biological Activity

NSC 15765 (Compound C5, DNA2 inhibitor C5) is an effective, selective and competitive inhibitor of **DNA2 nuclease** with IC₅₀ of 20 μM.

NSC 15765 poorly inhibits the activities of the other two nucleases, FEN1 and EXO1.

NSC 15765 suppresses resection-related homology directed repair (HDR) and single-strand annealing (SSA) and causes accumulation of phosphorylated RPA foci, and inhibits restart of stalled DNA replication forks and over-resection of nascent DNA in cells defective in fork protection.

NSC 15765 exhibits cytotoxicity against a panel of 18 cell lines with IC₅₀ of 7-70 μM.

NSC 15765 sensitizes cells to PARP inhibitor MK-4827; also sensitizes cells to CPT and synergizes with PARP inhibitors.

NSC 15765 also can mimics DNA2 knockout and synergistically kills cancer cells when combined with an ATR inhibitor.

References

Liu W, et al. *EBioMedicine.* 2016 Apr;6:73-86.

