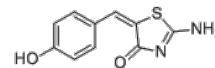


Product Name : Mirin
Cat. No. : PC-61927
CAS No. : 299953-00-7
Molecular Formula : C₁₀H₈N₂O₂S
Molecular Weight : 220.3
Target : DNA Repair Protein
Solubility : 10 mM in DMSO



Biological Activity

Mirin is a small molecule that specifically inhibits **endonuclease**, but not exonuclease activity of **MRE11**, inhibits MRN-mediated ATM activation (inhibition of H2AX phosphorylation) with IC₅₀ of 66 uM.

Mirin inhibits MRN/DSB-mediated ATM activation without affecting ATM protein kinase activity.

Mirin inhibits the MRN-dependent autophosphorylation of ATM at Ser1982 in response to DSBs.

Mirin inhibits dsDNA and resection in A549 cells with IC₅₀ of 200-300 uM, abolishes the G2/M checkpoint and homology-directed DNA repair in mammalian cells.

References

Shibata A, et al. *Mol Cell*. 2014 Jan 9;53(1):7-18.

Hengel SR, et al. *Cell Chem Biol*. 2017 Sep 21;24(9):1101-1119.

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

E-mail: tech@probechem.com