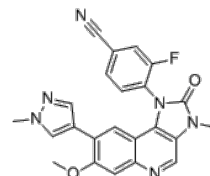


Product Name : M3541
Cat. No. : PC-73375
CAS No. : 1360628-91-6
Molecular Formula : C₂₃H₁₇FN₆O₂
Molecular Weight : 428.427
Target : ATM/ATR
Solubility : 10 mM in DMSO



Biological Activity

M3541 (M 3541) is a novel potent, selective and ATP-competitive **ATM kinase** inhibitor with IC₅₀ of 0.25 nM (ATP, 10 uM). M3541 displays a good margin of selectivity (>60-fold) against the closely related PIKK family members with DNA-PK, PI3K isoforms, mTOR, and ATR.

M3541 inhibits the phosphorylation of ATM as well as its cellular substrates CHK2, KAP1, and p53 in a concentration-dependent manner in A549 cells.

M3541 inhibits double strand break repair and sensitizes cancer cells to radiation.

M3541 suppresses ATM pathway activity and potentiates radiation efficacy in xenograft models of human cancer, synergizes with topoisomerase and PARP inhibitors.

References

Astrid Zimmermann, et al. *Mol Cancer Ther.* 2022 Apr 11;molcanther.0934.2021.

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

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