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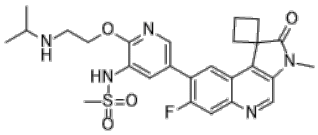
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	XRD-0394
Cat. No.	:	PC-22113
CAS No.	:	2595308-10-2
Molecular Formula	:	$C_{26}H_{30}FN_5O_4S$
Molecular Weight	:	527.62
Target	:	ATM/ATR
Solubility	:	10 mM in DMSO



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Biological Activity

XRD-0394 (XRD0394) is a potent, specific, orally bioavailable dual inhibitor of DNA damage-response kinases **ATM** and **DNA-PK** with IC50 of 0.39 and 0.89 nM, respectively.
XRD-0394 is >100-fold selective for ATM and DNA-PK versus mTOR, PI3Kβ, ATR and SMG-1 and > 40-fold selective versus PI3Kγ and PI3Kδ, and 14-fold selective versus PI3Kα.
XRD-0394 inhibits phosphorylation by ATM and DNA-PK kinases, but not structurally related kinases, in human tumor cell.
XRD-0394 shows both significantly greater radiosensitization and less cellular toxicity in the absence of IR when compared to a specific ATR inhibitor, RP3500.
XRD-0394 also potentiates the effectiveness of topoisomerase I inhibitors in vitro.
XRD-0394 shows single agent activity and synergy in combination with PARP inhibitors in cells lacking BRCA1/2.

References

Gilmer TM, et al. ***Mol Cancer Ther.*** 2024 Apr 8. doi: 10.1158/1535-7163.MCT-23-0890.

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