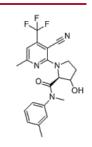


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## **Data Sheet**

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	•	ART558
Cat. No.		PC-72020
	•	PC-72020
CAS No.	:	2603528-97-6
Molecular Formula	:	$C_{21}H_{21}F_{3}N_{4}O_{2}$
Molecular Weight	:	418.42
Target	:	DNA/RNA Synthesis
Solubility	:	10 mM in DMSO (4.2 mg/mL)



## **Biological Activity**

ART558 (ART-558) is a highly potent, selective, allosteric inhibitor of the polymerase function of **DNA polymerase Pol9** with IC50 of 7.9 nM.

ART558 does not inhibit other human DNA polymerases, namely Polα, Polγ, Polγ and Polν, as well as a panel of 78 oncology-focussed kinases, including PARP1 and PARP2.

ART558 inhibits the major Polθ-mediated DNA repair process, Theta-Mediated End Joining, without targeting Non-Homologous End Joining (NHEJ).

ART558 elicits DNA damage and synthetic lethality in BRCA1- or BRCA2-mutant tumour cells and enhances the effects of PARP inhibitor Olaparib.

## References

Diana Zatreanu, et al. *Nat Commun.* 2021 Jun 17;12(1):3636.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com