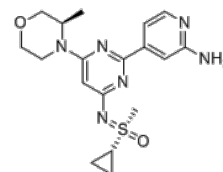


Product Name : ART0380
Cat. No. : PC-21873
CAS No. : 2267316-76-5
Molecular Formula : C₁₈H₂₄N₆O₂S
Molecular Weight : 388.49
Target : ATM/ATR
Solubility : 10 mM in DMSO



CAS: 2267316-76-5

Biological Activity

Alnodesertib (ART0380, ART-0380) is a potent, selective and ATP-competitive **ATR kinase** inhibitor, inhibits ATR-ATRIP complex enzyme activity with IC₅₀ of 51.7 nM, and phospho-Chk1 IC₅₀ of 22 nM in cell western assay.

ART0380 shows no effect on downstream markers of the ATR related enzymes ATM, DNA-PKcs, mTOR, and SMG1 at 3 uM in response to DNA damage induced by etoposide in NCI-H460 cells.

ART0380 induces robust inhibition of cell growth (LoVo, EC₅₀=1 uM; NCI-H23, EC₅₀=0.13 uM), with little to no effect in CCD-18Co normal fibroblasts (EC₅₀=6.4 uM).

ART0380 is effective in vivo in cancers with varying types of ATM, showing modulation of pChk1 Ser345 in tumor xenograft tissues

ART0380 (30 or 50 mg/kg) exhibits tumor growth inhibition in mice bearing ATM LOF Granta-519 xenografts.

ART0380 (100 mg/kg) exhibits tumor regression on patient-derived xenograft (PDX) model harboring a deleterious ATM gene variant (p.E473*), which induced a near total loss of ATM protein.

References

Pilie PG, et al. *Clin Cancer Res.* 2024 Feb 28.

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

E-mail: tech@probechem.com