

# RP-3500

Catalog No: **tcbc074297**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg



## Specifications

**CAS No:**

2417489-10-0

**Formula:**

$C_{21}H_{26}N_6O_3$

**Target:**

ATM/ATR

**Purity / Grade:**

>98% (HPLC)

**Solubility:**

10 mM in DMSO

**Storage Instruction:**

Solid Form: -20°C for 12 Months; 4°C for 6 Months In Solvent: -80°C for 6 Months; -20°C for 6 Months

**Alternative Names:**

(1R,3r,5S)-3-(6-((R)-3-methylmorpholino)-1-(1H-pyrazol-3-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl)-8-oxabicyclo[3.2.1]octan-3-ol

**Calculated Molecular Weight:**

410.478

## References

Anne Roulston, et al. Mol Cancer Ther. 2022 Feb;21(2):245-256.

## Product Description

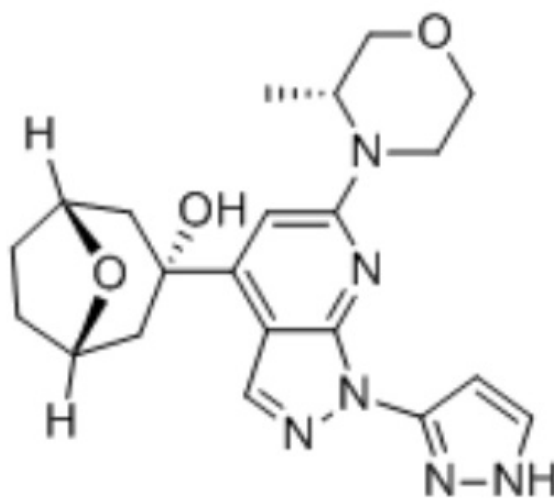
RP-3500 (RP3500) is a novel potent, selective, orally bioavailable ATR inhibitor with IC<sub>50</sub> of 1.0 and 0.33 nM in biochemical and cell-based assays, respectively.

RP-3500 displays 30-fold selectivity over mTOR and >2,000-fold selectivity over ATM, DNA-PK, and PI3K $\alpha$  kinases.

RP-3500 inhibited phosphorylated checkpoint kinase 1 (pCHK1) (IC<sub>80</sub>=18.6 nM) and induction of phosphorylated H2A.X variant histone ( $\gamma$ H2AX), phosphorylated DNA-PK catalytic subunit (pDNA-PKcs), and phosphorylated KRAB-associated protein 1 (pKAP1).

RP-3500 demonstrated potent single-agent efficacy and/or tumor regression in multiple xenograft models at minimum effective doses (MED) of 5 to 7 mg/kg once daily.

RP-3500 demonstrated superior efficacy when combined with PARP inhibitor olaparib or niraparib.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!