

Data Sheet

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 Product Name
 :
 AOH1996

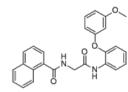
 Cat. No.
 :
 PC-20997

 CAS No.
 :
 2089314-64-5

 Molecular Formula
 :
 C₂₆H₂₂N₂O₄

 Molecular Weight
 :
 426.47

Target : DNA Repair Protein
Solubility : 10 mM in DMSO



CAS: 2089314-64-5

Biological Activity

AOH1996 (AOH-1996) is a small molecule, orally active inhibitor of cancer-associated isoform of proliferating cell nuclear antigen (**caPCNA**), exerts potent, selective anticancer effects.

AOH1996 targets the PIP box and APIM binding domain of PCNA, and stabilizes the interaction between PCNA and RPB1, thereby interfering with the resolution of transcription-replication conflicts.

AOH1996 is an analog of AOH1160 (Cat. PC-35301) that exhibits remarkable therapeutic properties.

AOH1996 stabilizes the interaction between chromatin-bound PCNA and the largest subunit (RBP1) of RNA polymerase II (RNAPII), leading to degradation of the intracellular RPB1.

AOH1996 also dissociates PCNA from actively transcribed chromatin and causes DSB accumulation, without affecting the presence of PCNA in the heterochromatin region.

AOH1996 induces a substantial change in cell-cycle profile that indicates G2/M and/or S phase arrest in cancer cells, but not non-malignant stem cells.

AOH1996 significantly reduced the tumor burden in mice bearing xenograft tumors derived from either neuroblastoma, breast cancer, or small cell lung cancer cells, with no discernable side effects.

References

Long Gu, et al. Cell Chem Biol. 2023 Jul 26;S2451-9456(23)00221-0.

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

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