

Product Datasheet

VVD-214

Catalog No. **BP-00122** · CAS **3026500-20-6** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-14**

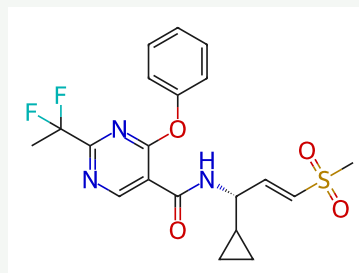
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Target DNA/RNA Synthesis	Research area Cancer
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Molecular formula **C₂₀H₂₁F₂N₃O₄S**

Molecular weight **437.4600**

STRUCTURE



DESCRIPTION

VVD-133214 is a covalent allosteric inhibitor of WRN. It selectively engages a cysteine (C727). VVD-133214 binds WRN protein cooperatively with nucleotide. VVD-133214 can be used for MSI-H cancers study.

BIOLOGICAL ACTIVITY

VVD-214 is a synthetic lethal allosteric inhibitor of WRN helicase. VVD-214 covalently binds to cysteine 727 of WRN and inhibits ATP hydrolysis and helicase activity. VVD-214 is potent in causing double-stranded DNA breaks, nuclear swelling, and cell death in high microsatellite instability (MSI) cancers.

SOLUBILITY

Soluble in DMSO

REFERENCES

- [1]. Baltgalvis KA, Lamb KN, Symons KT, et al. Chemoproteomic discovery of a covalent allosteric inhibitor of WRN helicase. Nature. Published online April 24, 2024. doi:10.1038/s41586-024-07318-y
- [2]. Kikuchi S, et al. Abstract ND11: Chemoproteomic-enabled discovery of VVD-214, a synthetic lethal allosteric inhibitor of WRN helicase[J]. Cancer Research, 2024, 84(7_Supplement): ND11-ND11.