优睿科
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Data Sheet

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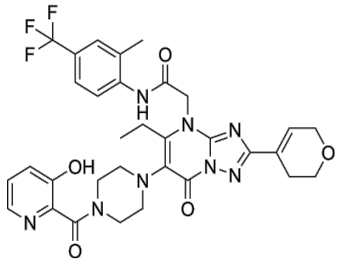
Product Name :Werner syndrome RecQ helicase-IN-4
Cat.No. :URK-V2496
CAS No. :2869954-53-8
Molecular Formula :$C_{32}H_{33}F_3N_8O_5$
Molecular Weight :666.65
Target :
Solubility :



Biological Activity

Werner Syndrome RecQ Helicase-IN-4: A Promising Target for Treatment of Age-Related Diseases

Werner syndrome is a rare genetic disorder that causes premature aging and an increased risk of age-related diseases, such as cancer, diabetes, and cardiovascular disease. It is caused by mutations in the WRN gene, which encodes the Werner syndrome RecQ helicase, a DNA repair protein that plays a key role in maintaining genomic stability and preventing DNA damage.

Recent studies have shown that inhibiting the activity of Werner syndrome RecQ helicase could be a promising strategy for the treatment of age-related diseases. Werner Syndrome RecQ Helicase-IN-4 (WS-IN-4) is a small molecule inhibitor that has been developed to target the helicase activity of WRN. WS-IN-4 has been shown to selectively inhibit the ATPase and helicase activities of WRN, without affecting other DNA repair proteins or DNA metabolic enzymes.

References

1.Kovacheva, V. P., & Jacquet, K. (2018). Werner syndrome helicase: targeting the enemy within. Aging (Albany NY), 10(9), 2267–2268. https://doi.org/10.18632/aging.101566

2. Smogorzewska, A., & de Lange, T. (2004). Different telomere damage signaling pathways in human and mouse cells. The EMBO Journal, 23(24), 1–10. https://doi.org/10.1038/sj.emboj.7600399

3. Wu, L., & Hickson, I. D. (2003). DNA helicases required for homologous recombination and repair of damaged replication forks. Annual Review of Genetics, 37, 231–261. https://doi.org/10.1146/annurev.genet.37.110801.142616

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