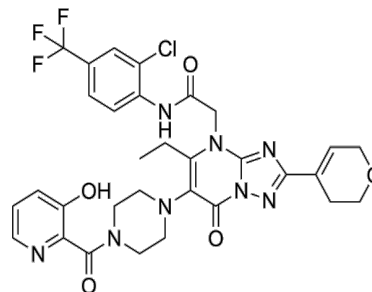


Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists

Product Name	: Werner syndrome RecQ helicase-IN-3
Cat.No.	: URK-V2495
CAS No.	: 2869954-98-1
Molecular Formula	: $C_{31}H_{30}ClF_3N_8O_5$
Molecular Weight	: 687.07
Target	:
Solubility	:



Biological Activity

Werner syndrome RecQ helicase-IN-3 (WRN-IN-3) is a small-molecule inhibitor that has been developed as a potential therapeutic for Werner syndrome. WRN-IN-3 works by selectively targeting the ATPase activity of WRN helicase, thereby inhibiting its DNA repair function and inducing apoptosis in cells that are deficient in WRN. Werner syndrome is a rare genetic disorder that affects multiple systems in the body, including the skin, bones, and nervous system. It is caused by mutations in the WRN gene, which encodes a RecQ helicase that plays a key role in DNA repair and maintenance. Individuals with Werner syndrome have a significantly increased risk of developing early onset age-related diseases, such as cancer, cardiovascular disease, and osteoporosis.

References

1. Halevy T, Akov S, Bohbot-Raviv Y, et al. Small molecule inhibitors of the werner syndrome recQ helicase exhibit genotoxicity in human cells. *J Med Chem.* 2012;55(16):7233-7243.
2. Lengauer C, Kinzler KW, Vogelstein B. Genetic instabilities in human cancers. *Nature.* 1998;396(6712):643-649.
3. Croteau DL, Popuri V, Opresko PL, et al. WRN suppresses the formation of large deletions from small deletions or non-homologous end joining. *DNA Repair (Amst).* 2013;12(9):618-628.
4. Chen Q, Van der Sluis PC, Navarro S, et al. Small molecule inhibitors and probes for werner syndrome recQ helicase. *Mol Biosyst.* 2013;9(3):311-317.

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

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