

## **Data Sheet**

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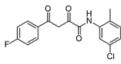
Global Supplier of Chemical Probes, Inhibitors & Agonists.

**Product Name** : SEC inhibitor KL-2

Cat. No. : PC-35725 CAS No. : 900308-51-2  $\textbf{Molecular Formula:} \quad \mathsf{C}_{17}\mathsf{H}_{13}\mathsf{CIFNO}_3$ **Molecular Weight:** 333.743

**Target** 

: DNA/RNA Synthesis Solubility : 10 mM in DMSO



## **Biological Activity**

SEC inhibitor KL-2 is a peptidomimetic inhibitor of super elongation complex (SEC) and transcription elongation by Pol II, disrupts cyclin T1-AFF4 interaction (Ki=1.50 uM) within SEC.

SEC inhibitor KL-2 disrupts the interaction between the SEC scaffolding protein AFF4 and P-TEFb, resulting in impaired release of Pol II from promoter-proximal pause sites and a reduced average rate of processive transcription elongation. SEC inhibitor KL-2 attenuates the heat-shock response from Drosophila to human, reduces protein levels of SEC components AFF1 and AFF4, but not CDK9 or CCNT1 in HEK293T cells.

SEC inhibitor KL-2 downregulates MYC and MYC-dependent transcriptional programs in mammalian cells and delays tumor progression in mouse xenograft models of MYC-driven cancer.

## References

Liang K, et al. *Cell.* 2018 Oct 18;175(3):766-779.e17.

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

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