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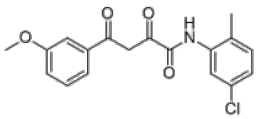
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SEC inhibitor KL-1
Cat. No.	:	PC-35724
CAS No.	:	900308-84-1
Molecular Formula	:	$C_{18}H_{16}ClNO_4$
Molecular Weight	:	345.779
Target	:	DNA/RNA Synthesis
Solubility	:	10 mM in DMSO



Biological Activity

SEC inhibitor KL-1 is a peptidomimetic inhibitor of **super elongation complex (SEC)** and transcription elongation by **Pol II**, disrupts cyclin T1-AFF4 interaction (Ki=3.48 uM) within SEC。
SEC inhibitor KL-1 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-1 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-1 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.

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