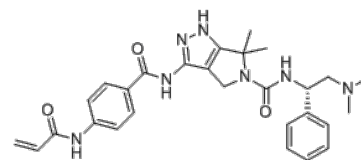


**Product Name** : YKL-5-124  
**Cat. No.** : PC-36145  
**CAS No.** : 1957203-01-8  
**Molecular Formula** : C<sub>28</sub>H<sub>33</sub>N<sub>7</sub>O<sub>3</sub>  
**Molecular Weight** : 515.618  
**Target** : Cyclin-dependent Kinase (CDK)  
**Solubility** : 10 mM in DMSO



### Biological Activity

YKL-5-124 is a novel potent, selective, and covalent **CDK7** inhibitor (IC<sub>50</sub>=53.5 nM), inhibits CDK7/CycH/MAT1 enzymatic activity with IC<sub>50</sub> of 9.7 nM.

YKL-5-124 displays biochemical and cellular selectivity for CDK7 over structurally related kinases CDK12/13, and no significant activity against CDK2 and CDK9 (IC<sub>50</sub>>1 μM).

YKL-5-124 targets and forms a covalent bond with CDK7- cysteine 312 (C312).

Inhibition of CDK7 by YKL-5-124 elicits a transcriptional signature distinct from that of THZ1, shows no discernible effect on RNA Pol II CTD phosphorylation.

YKL-5-124 recapitulate THZ1-mediated effects on gene expression and CTD phosphorylation when combined with CDK12/13 inhibitor THZ531.

### References

Olson CM, et al. *Cell Chem Biol.* 2019 Mar 6. pii: S2451-9456(19)30067-4.

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

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