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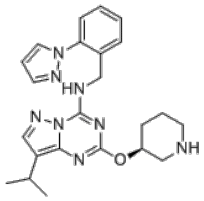
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	LDC4297
Cat. No.	:	PC-20316
CAS No.	:	1453834-21-3
Molecular Formula	:	$C_{23}H_{28}N_8O$
Molecular Weight	:	432.53
Target	:	Cyclin-dependent Kinase (CDK)
Solubility	:	10 mM in DMSO



Biological Activity

LDC4297 (LDC044297) is a potent, highly specific **CDK7** inhibitor with IC50 of 7.4 nM in ATP competition assays (3.5 mM ATP), weakly inhibits CDK2 (IC50>2 uM).
LDC4297 prevents RNA polymerase II (RNAPII) transcription in an inducible-gene setting, reduces in vitro transcription by RNAPII.
LDC4297 causes tumor cell death and cell-type-dependent cell cycle delay in A549 cells and HCT116 cells.
LDC4297 effectively blocks the replication of human cytomegalovirus (HCMV) in primary human fibroblasts with EC50 of 24.5 nM, interferes HCMV-driven inactivation of retinoblastoma protein (Rb), a regulatory step generally considered a hallmark of herpesviral replication.

References

Kelso TW, et al. ***Mol Cell Biol.*** 2014 Oct 1;34(19):3675-88.

Hutterer C, et al. ***Antimicrob Agents Chemother.*** 2015 Apr;59(4):2062-71.

Ghezzi C, et al. ***Nat Commun.*** 2019 Nov 29;10(1):5444.

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

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