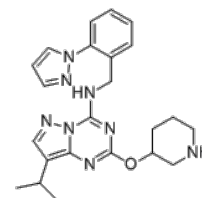


Product Name : LDC4297
Cat. No. : PC-20316
CAS No. : 1453834-21-3
Molecular Formula : C₂₃H₂₈N₈O
Molecular Weight : 432.53
Target : Cyclin-dependent Kinase (CDK)
Solubility : 10 mM in DMSO



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 μM).

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

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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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