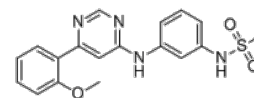


Product Name : LDC000067
Cat. No. : PC-21088
CAS No. : 1073485-20-7
Molecular Formula : C₁₈H₁₈N₄O₃S
Molecular Weight : 370.43
Target : Cyclin-dependent Kinase (CDK)
Solubility : 10 mM in DMSO



Biological Activity

LDC000067 (LDC067) is a highly specific inhibitor of **CDK9** with IC₅₀ of 44 nM (CDK9-Cyclin T1), highly selective over other CDKs in the range of 55-fold (CDK2) to over 230-fold (CDK6 and CDK7).

LDC000067 displays 55/125/210/ >227/ >227-fold selectivity for CDK9 versus CDK2/1/4/6/7, shows better selectivity profile than the known and widely used inhibitors DRB and flavopiridol.

LDC000067 inhibits P-TEFb-dependent in vitro transcription in an ATP-competitive manner, decreases phosphorylation of the Ser2 residue within the CTD of RNAPII, both in cells and nuclear extracts.

CDK9 inhibition by LDC067 increases promoter-proximal RNAPII levels.

LDC000067 attenuates atherosclerosis by inhibiting inflammation and phenotypic switching of vascular smooth muscle cells.

References

Albert TK, et al. *Br J Pharmacol*. 2014 Jan;171(1):55-68.

Huang S, et al. *Aging (Albany NY)*. 2021 Jun 8;13(11):14892-14909.

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

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