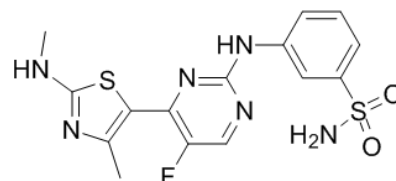


Product Name : CDKI-73
Cat. No. : PC-43037
CAS No. : 1421693-22-2
Molecular Formula : C₁₅H₁₅FN₆O₂S₂
Molecular Weight : 394.447
Target : Cyclin-dependent Kinase (CDK)
Solubility : 10 mM in DMSO



Biological Activity

Asnuciclib (CDKI-73) is a potent **CDK9** inhibitor with K_i of 4 nM, shows cytotoxicity against a broad CLL samples with mean LD50 of 80 nM.

CDKI-73 induces caspase-dependent apoptosis that was preceded by dephosphorylation of CDK9 and serine 2 of RNA polymerase II.

CDKI-73 is more potent than the pan-CDK inhibitor Flavopiridol and shows >200-fold selectivity against primary leukemia cells when compared with normal CD34+ cells.

CDKI-73 shows cytotoxic synergy with the nucleoside analog fludarabine in in poor prognostic sub-groups of leukemia patients, which is associated with CDKI-73-mediated transcriptional inhibition of MCL1 and XIAP.

References

Walsby E, et al. *Oncotarget*. 2014 Jan 30;5(2):375-85.

Lam F, et al. *Oncotarget*. 2014 Sep 15;5(17):7691-704.

Cao S, et al. *Biochem Biophys Res Commun*. 2017 Jan 22;482(4):536-541.

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

E-mail: tech@probechem.com