

## **Data Sheet**

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 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

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## **Biological Activity**

Asnuciclib (CDKI-73) is a potent **CDK9** inhibitor with Ki 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!

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