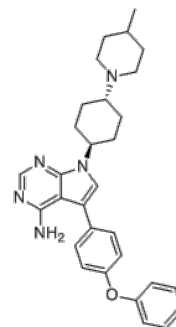


Product Name : RK-20449
Cat. No. : PC-35754
CAS No. : 364042-47-7
Molecular Formula : C₃₀H₃₅N₅O
Molecular Weight : 481.644
Target : Src
Solubility : 10 mM in DMSO



Biological Activity

RK-20449 (RK20449) is a potent, small molecule inhibitor of hematopoietic cell kinase (**HCK**) with IC₅₀ of 0.43 nM. RK-20449 displays an IC₅₀ <100 nM against 7 kinases in a panel of 107 human kinases, all of which are SFKs (FYN, HCK, LCK, LYNa, LYNb, SRC, and YES), consistent with the high level of amino acid sequence homology among the SFKs. RK-20449 potently inhibits CD34⁺ CD38⁻ human primary AML cell proliferation to a greater extent than the known SFK inhibitor PP2, shows dose-dependent inhibition of leukemia stem cells (LSCs) proliferation with IC₅₀ <1 μM in 17 of 25 AML cases. RK-20449 significantly reduces human LSC and non-stem AML burden in vivo models.

References

- Saito Y, et al. *Sci Transl Med*. 2013 Apr 17;5(181):181ra52.
Poh AR, et al. *Cancer Cell*. 2017 Apr 10;31(4):563-575.e5.
Yuki H, et al. *Bioorg Med Chem*. 2017 Aug 15;25(16):4259-4264.

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

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