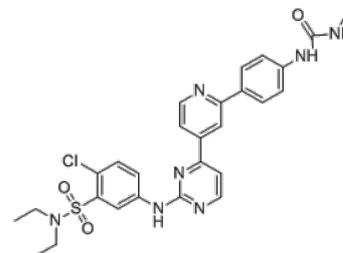


Product Name : hSMG-1 inhibitor 11j
Cat. No. : PC-35721
CAS No. : 1402452-15-6
Molecular Formula : C₂₇H₂₈ClN₇O₃S
Molecular Weight : 566.077
Target : PI3K
Solubility : 10 mM in DMSO



Biological Activity

hSMG-1 inhibitor 11j (SMG1i) is a potent, selective PI3K-related protein kinase **hSMG-1** inhibitor with IC₅₀ of 0.11 nM, 455-fold selectivity over mTOR and no activity against CDK1/2.

SMG1i eliminates UPF1 phosphorylation at 1 μM and significantly reduced it at 0.3 μM, shows little apparent effect on phospho p70s6 K and phospho AKT, targets of mTOR and PI3K.

SMG1i specifically inhibits SMG1 in vitro by competing with ATP binding.

SMG1i also shows good inhibition in an MDA468 cell proliferation assay with an IC₅₀ of 75 nM, providing a tool compound to probe hSMG-1 mediated tumor biology.

References

- Gopalsamy A, et al. *Bioorg Med Chem Lett*. 2012 Nov 1;22(21):6636-41.
- Lukas M Langer, et al. *Elife*. 2021 Oct 26;10:e72353.

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

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