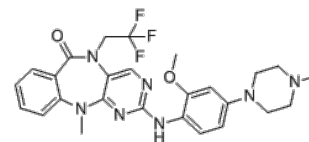


**Product Name** : DCLK1-IN-1  
**Cat. No.** : PC-38227  
**CAS No.** : 2222635-15-4  
**Molecular Formula** : C<sub>26</sub>H<sub>28</sub>F<sub>3</sub>N<sub>7</sub>O<sub>2</sub>  
**Molecular Weight** : 527.552  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



### Biological Activity

DCLK1-IN-1 is the first potent, selective inhibitor of the **DCLK1** and **DCLK2** kinases with IC<sub>50</sub> of 9.5 nM and 31 nM in binding assays, respectively.

DCLK1-IN-1 exclusively inhibited DCLK1 and DCLK2 across a panel of 489 human kinases, significantly inhibited DCLK1, and weakly inhibited ERK5, in PATU-8988T cell lysates and live cells, did not inhibit any kinases under these conditions.

DCLK1-IN-1 displays pronounced on-target DCLK1 activity in vitro, and is suitable probe for in vivo evaluation.

Proteins associated with cell motility, including HN1, ZIP8 and FYN, were significantly downregulated after DCLK1-IN-1 treatment in the organoid cultures.

### References

Fleur M Ferguson, et al. *Nat Chem Biol.* 2020 Jun;16(6):635-643.

Fleur M Ferguson, et al. *J Med Chem.* 2020 Jul 23;63(14):7817-7826.

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

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