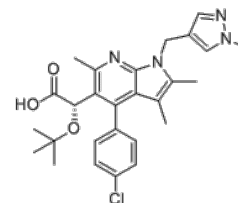


**Product Name** : STP0404  
**Cat. No.** : PC-73436  
**CAS No.** : 2245231-10-9  
**Molecular Formula** : C<sub>27</sub>H<sub>31</sub>ClN<sub>4</sub>O<sub>3</sub>  
**Molecular Weight** : 495.020  
**Target** : HIV  
**Solubility** : 10 mM in DMSO



## Biological Activity

Pirmitegravir (STP0404) is a highly potent, first-in-class, allosteric **HIV-1 integrase** inhibitor (ALLINI) with IC<sub>50</sub> of 0.41 nM against HIV-1NL4-3 in human PBMCs.

STP0404 inhibited dual tropic HIV-189.6 at 1.4 nM IC<sub>50</sub> in CEMx174 cells.

STP0404 inhibited IN-LEDGF/p75 binding with IC<sub>50</sub> of 0.19 μM in HTRF-based assay.

STP0404 binds to the host LEDGF/p75 protein binding pocket of the IN dimer, which induces aberrant IN oligomerization and blocks the IN-RNA interaction.

STP0404 inhibits proper localization of HIV-1 RNA genomes in viral particles during viral maturation.

Y99H and A128T mutations at the LEDGF/p75 binding pocket render resistance to STP0404.

## References

Maehigashi T, et al. *PLoS Pathog.* 2021 Jul 22;17(7):e1009671.

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

E-mail: tech@probechem.com