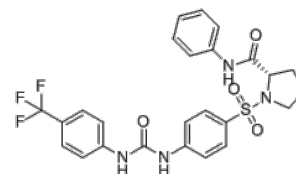


**Product Name** : ZL0580  
**Cat. No.** : PC-73041  
**CAS No.** : 2377151-10-3  
**Molecular Formula** : C<sub>25</sub>H<sub>23</sub>F<sub>3</sub>N<sub>4</sub>O<sub>4</sub>S  
**Molecular Weight** : 532.538  
**Target** : Bromodomain  
**Solubility** : 10 mM in DMSO



### Biological Activity

ZL0580 (ZL-0580) is a small molecule that induces epigenetic suppression of HIV via **BRD4**, suppresses PMA-induced HIV activation.

ZL0580 induces epigenetic reprogramming of HIV LTR in J-Lat cells, suppresses HIV in in vitro HIV-infected human CD4+ T cells, did not significantly alter HIV DNA levels, but reduced HIV transcription in PBMCs.

ZL0580 suppresses HIV transcription ex vivo in PBMCs of viremic HIV-infected participants.

ZL0580 more selectively binds to the BRD4 BD1 domain (IC<sub>50</sub>=163 nM) instead of BD2 (IC<sub>50</sub>=1071 nM).

ZL0580 also displays approximately 6- to 11-fold selectivity for BRD4 over other BET proteins (IC<sub>50</sub> ranged from approximately 0.9 to 1.9 μM) as well as over a non-BET BD protein, CBP (IC<sub>50</sub> >10 μM).

ZL0580 inhibits Tat transactivation and key factors in HIV transcription elongation.

### References

Niu Q, et al. *J Clin Invest*. 2019 Jul 22;129(8):3361-3373.

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

E-mail: tech@probechem.com