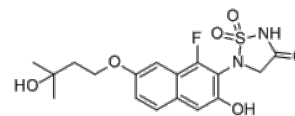


**Product Name** : Compound 182  
**Cat. No.** : PC-20969  
**CAS No.** : 2407611-02-1  
**Molecular Formula** : C<sub>17</sub>H<sub>19</sub>FN<sub>2</sub>O<sub>6</sub>S  
**Molecular Weight** : 398.41  
**Target** : Protein Phosphatase/PTP  
**Solubility** : 10 mM in DMSO



CAS: 2407611-02-1

## Biological Activity

Compound 182 is a highly potent and selective active site competitive inhibitor of **PTP1B** and **PTPN2**, inhibits the catalytic activities of PTP1B and PTPN2 with IC<sub>50</sub> of 0.63 and 0.58 nM, respectively.

Compound 182 is a classic competitive inhibitor of PTP1B and PTPN2, with K<sub>i</sub> values of 0.34 and 0.26 nM respectively.

Compound 182 inhibits PTP1B and PTPN2 in a reversible manner.

Compound 182 exhibits >15,00-fold selectivity for PTP1B and PTPN2 over other PTP family members with the exception of PTPe, CDC14B and CDC14A for which it is >1,300-, >8,000- and >10,000-fold respectively more selective for PTP1B and PTPN2.

Compound 182 promotes TCR and cytokine signaling in T cells, significantly enhances T cell responses ex vivo.

Compound 182 (10 mg/kg every 2 days or 3 days, i.v.) effectively represses the growth of AT3-OVA syngeneic tumors in C57BL/6 mice without promoting overt immune-related toxicities.

Compound 182 increases both the infiltration and activation of T cells, as well as the recruitment of NK cells and B cells that promote anti-tumor immunity.

## References

Patent WO2019/246513A1

Liang S, et al. *Nat Commun.* 2023 Jul 27;14(1):4524.

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

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