

Data Sheet

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| Product Name | : LMPTP inhibitor 23 dihydrochloride | \bigcirc |
|-------------------|--|-----------------|
| Cat. No. | : PC-21977 | N N |
| CAS No. | : 2310135-46-5 | <u>_</u> |
| Molecular Formula | : C ₂₈ H ₃₈ Cl ₂ N ₄ O | HN H-CI H-CI |
| Molecular Weight | : 517.54 | |
| Target | : Protein Phosphatase/PTP | |
| Solubility | : 10 mM in DMSO | ₩_N |

Biological Activity

LMPTP inhibitor 23 dihydrochloride is a potent, selective, orally bioavailable low-molecular-weight protein tyrosine phosphatase (LMPTP) inhibitor with IC50 of 0.8 uM.

LMPTP inhibitor 23 displays exquisite selectivity for LMPTP versus other PTPs including PTP1B, shows greater potency on LMPTP-A versus LMPTP-B.

LMPTP inhibitor 23 inhibits uncompetitively LMPTP with Ki of 846 nM.

LMPTP inhibitor 23 substantially increases HepG2 IR phosphorylation after insulin stimulation and reversess diabetes in mice without causing overt toxicity or weight loss.

References

Stanford SM, et al. Nat Chem Biol. 2017 Jun;13(6):624-632.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com