

Product Data Sheet

PTP1B/AKR1B1-IN-2

Cat. No.: HY-149255 Molecular Formula: $C_{23}H_{23}NO_4S_2$

Molecular Weight: 441.56

Target: Phosphatase; Aldose Reductase

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

S N OI

BIOLOGICAL ACTIVITY

Description PTP1B/AKR1B1-IN-2 (Compound 7f) is a dual PTP1B/AKR1B1 inhibitor (IC₅₀s: 3.2 and 2.1 μM, K_is: 4.0 and 0.9μM).

 $PTP1B/AKR1B1-IN-2\ is\ an\ insulin-mimetic\ agent.\ PTP1B/AKR1B1-IN-2\ improves\ glucose\ uptake\ in\ murine\ C2C12\ myoblasts.$

PTP1B/AKR1B1-IN-2 can be used for research of Type 2 diabetes mellitus (T2DM)^[1].

REFERENCES

[1]. Maccari R, et al. Designed multiple ligands for the treatment of type 2 diabetes mellitus and its complications: Discovery of (5-arylidene-4-oxo-2-thioxothiazolidin-3-yl)alkanoic acids active as novel dual-targeted PTP1B/AKR1B1 inhibitors. Eur J Med Chem. 2023 Apr 5;252:115270.

Caution: Product has not been fully validated for medical applications. For research use only.

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Inhibitors