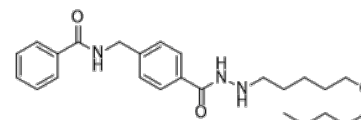


Product Name : HDAC11 inhibitor B6
Cat. No. : PC-24022
CAS No. : 2919766-97-3
Molecular Formula : C₂₅H₃₅N₃O₃
Molecular Weight : 425.57
Target : HDAC
Solubility : 10 mM in DMSO



CAS: 2919766-97-3

Biological Activity

HDAC11 inhibitor B6 is a potent, highly selective **HDAC11** inhibitor with IC₅₀ of 51.1 nM, >90-fold selective over HDAC8 and shows no activity against all other HDAC subtypes.

B6 induces a markedly increase in the myristoylation of SHMT2, a specific substrate of HDAC11, in HEK293T cells, with no effect on the acetylation levels of histones H3 and H4 (substrates of class I HDACs: HDAC1/2/3/8) or tubulin (a substrate of HDAC6).

B6 can be used for in vivo studies of liver diseases.

B6 mitigates FFA-induced lipid accumulation by inhibiting DNL and promoting fatty acid oxidation in AML12 cells.

B6 regulates genes involved in DNL and fatty acid oxidation through the inhibition of HDAC11.

B6 (5-10 mg/kg, 0.5% HPMC) significantly mitigates high fat diet (HFD)-induced MASLD.

B6 facilitates the phosphorylation of AMP-activated protein kinase α1 (AMPKα1) at Thr172, which consequently reduces DNL and enhances fatty acid oxidation.

References

Zhang F, et al. *Adv Sci (Weinh)*. 2025 Feb 20:e2412903.

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

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