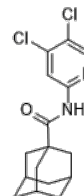


Product Name : Insulin sensitizer C59
Cat. No. : PC-25211
CAS No. : 2761446-81-3
Molecular Formula : C₁₆H₁₈Cl₂N₂O
Molecular Weight : 325.23
Target : Glucose Transporter (GLUT)
Solubility : 10 mM in DMSO



Biological Activity

Insulin sensitizer C59 is a small molecule insulin sensitizer that improve insulin-stimulated GLUT4 translocation through binding to Unc119b.

C59 does not trigger significant GLUT4 translocation in the absence of insulin but increased insulin-stimulated GLUT4 translocation in a concentration-dependent manner.

C59 improves GLUT4 translocation and glucose uptake in DIO mice

C59 treatment resulted in a significantly lowered fasting blood glucose and plasma insulin concentrations in DIO mice.

C59 sensitizes insulin action through interaction with Unc119 and Unc119B.

Unc119b interacts with Rac1 and inhibits its activation by insulin, resulting in reduced GLUT4 translocation.

References

Mittal A, et al. Mol Metab. 2025 Aug 1:102230.

Yin TC, et al. Cell Chem Biol. 2023 Aug 17;30(8):933-942.e6.

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

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