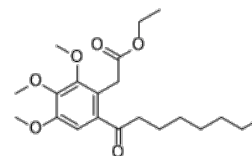


Product Name : TMPA
Cat. No. : PC-26967
CAS No. : 1258275-73-8
Molecular Formula : C₂₁H₃₂O₆
Molecular Weight : 380.48
Target : Nur77 (NR4A1)
Solubility : 10 mM in DMSO



Biological Activity

TMPA is a specific, high-affinity Nur77 antagonist that binds directly to Nur77 ligand-binding domain (LBD) with KD of 0.25 uM, antagonizes the Nur77-LKB1 interaction, induces LKB1 nuclear export to activate AMPK α .

TMPA enhances rather than downregulates the phosphorylation of AMPK α in hepatic LO2 cells in both dose- and time-dependent manners.

TMPA has a strong affinity for both Nur77 and LBD in the quenching experiments but not for monomeric or heterotrimeric AMPK α , AMPK β , AMPK γ or LKB1.

TMPA does not show any effect on Nur77 transactivation activity.

TMPA affects subcellular localization of LKB1 through phosphorylation at Ser428 in LO2 cells.

TMPA is capable of lowering blood glucose in HFD- and STZ-induced diabetic mice.

References

Zhan YY, et al. Nat Chem Biol. 2012 Nov;8(11):897-904.

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

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