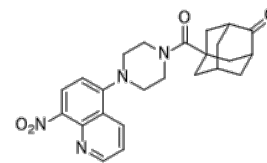


Product Name : TH-407b
Cat. No. : PC-23645
CAS No. : 2616629-76-4
Molecular Formula : C₂₄H₂₆N₄O₄
Molecular Weight : 434.49
Target : Toll-like Receptor (TLR)
Solubility : 10 mM in DMSO



CAS: 2616629-76-4

Biological Activity

TH-407b is a potent and selective **TLR7** inhibitor, dose-dependently inhibits R848-induced TLR7 activation with IC₅₀ of 0.23 uM in HEK-Blue hTLR7 cells.

TH-407b binds to TLR7 (ITC KD=5.1 uM) and induces receptors dimerization, stabilizes the inactivated dimeric state.

TH-407b inhibits TLR7 signaling pathway and TLR7-mediated cytokine production.

TH-407b not only effectively inhibits TLR7-mediated pro-inflammatory signaling in a variety of cultured cell lines but also demonstrates potent inflammation suppressing activities in primary peripheral blood mononuclear cells (PBMCs) derived from systemic lupus erythematosus (SLE) patients.

TH-407b shows prominent efficacy in vivo, improves survival rate and ameliorates symptoms of SLE model mice.

References

Wang M, et al. *Acta Pharm Sin B*. 2024 Nov;14(11):4899-4913.

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

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