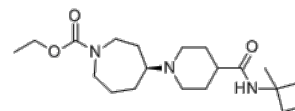


Product Name : HTL9936
Cat. No. : PC-72655
CAS No. : 1438242-59-1
Molecular Formula : C₂₀H₃₅N₃O₃
Molecular Weight : 365.518
Target : mAChR
Solubility : 10 mM in DMSO



Biological Activity

HTL9936 (HTL-9936) is a potent, selective **M1-muscarinic acetylcholine (M1) receptor** partial agonist with EC₅₀ of 32 nM. HTL9936 displays little to no activity against M2 (EC₅₀>20 μM), M3 (EC₅₀>20 μM), M4 (EC₅₀=398 nM). HTL9936 demonstrated agonist activity in pERK1/2 (EC₅₀=32 nM), label-free dynamic mass redistribution (EC₅₀=79 nM) and inositol phosphate (IP1) assay formats (EC₅₀=631 nM) in CHO cells overexpressing human M1-receptor. HTL9936 demonstrated no detectable agonism at human M2-, M3-, or M5-receptors, although partial agonist activity was observed at the human M4-receptor. Co-administration of HTL9936 with scopolamine resulted in a dose-dependent restoration of learning and memory responses, reverses cognitive deficits in a mouse model of neurodegeneration.

References

Alastair J H Brown, et al. *Cell*. 2021 Nov 24;184(24):5886-5901.e22.

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

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