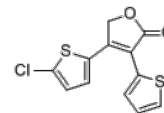


Product Name : YC-001
Cat. No. : PC-35071
CAS No. : 748778-73-6
Molecular Formula : C₁₂H₇ClO₂S₂
Molecular Weight : 282.756
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

YC-001 is a novel pharmacological chaperone of rod photoreceptor opsin, rescues the transport of multiple **rod opsin** mutants in mammalian cells, an inverse agonist and antagonist of **rod opsin**.

YC-001 demonstrates micromolar potency and efficacy greater than 9-cis-retinal with lower cytotoxicity.

YC-001 binds to bovine rod opsin with an EC₅₀ (8.7 uM) similar to 9-cis-retinal, improves the glycosylation of the P23H-opsin mutant.

YC-001 is an inverse agonist and antagonist of rod opsin that non-competitively antagonizes rod opsin signaling, delays isorhodopsin pigment regeneration; protects Abca4 ^{-/-} Rdh8 ^{-/-} mice from bright light-induced retinal degeneration.

References

Chen Y, et al. *Nat Commun.* 2018 May 17;9(1):1976.

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

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