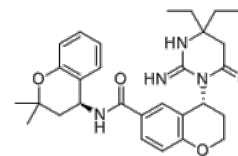


Product Name : WM382
Cat. No. : PC-49829
CAS No. : 2606990-92-3
Molecular Formula : C₂₉H₃₆N₄O₄
Molecular Weight : 504.63
Target : Parasite
Solubility : 10 mM in DMSO



Biological Activity

WM382 (WM-382) is a potent, specific dual inhibitor of the aspartic proteases **Plasmepsin IX** and **X (PMIX and PMX)** with IC₅₀ of 0.06 nM (PMX), blocks multiple stages of the Plasmodium life cycle. WM382 displays no activity against the P. falciparum aspartic protease PMV (>300,000-fold). WM382 inhibits P. falciparum and P. knowlesi growth with EC₅₀s of 0.6 nM and 0.2 nM, respectively. WM382 is not cross-resistant to other antimalarial drugs (chloroquine, mefloquine, artemisinin, and atovaquone). WM382 (2.5 nM) potently inhibited egress of merozoites from the erythrocyte. WM382 (20 mpk, orally administered twice daily (b.i.d. dosage)) suppresses P. berghei and P. falciparum infection infection in mice infected models. WM382 prevents transmission to mosquitoes and transition from liver to blood infection.

References

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 Favuzza P, et al. **Cell Host Microbe.** 2020 Apr 8;27(4):642-658.e12.
 Hodder AN, et al. **Structure.** 2022 Jul 7;30(7):947-961.e6.

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

E-mail: tech@probechem.com