

Product Datasheet

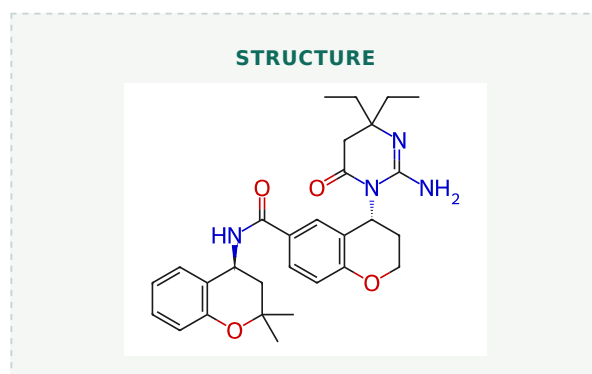
WM382

Catalog No. **BP-02241** · CAS **2606990-92-3** · Form **free base** · Physical state **other** · Color **White to off-white** · Version **1.0** · Revision **2026-09-03**

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Target Parasite	Research area Infection
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Molecular formula	C₂₉H₃₆N₄O₄
Molecular weight	504.6205



DESCRIPTION

WM382 is an orally active and potent dual plasmepsin IX/X (PMIX/X) inhibitor with IC₅₀ values of 1.4 nM and 0.03 nM, respectively. WM382 has robust in vivo efficacy at multiple stages of the malaria parasite life cycle and an excellent resistance profile.

BIOLOGICAL ACTIVITY

In Vitro

WM382 shows moderate cytotoxicity against HepG2 cells (IC₅₀=24.8 μM), and inhibits Plasmodium falciparum and P. vivax with an IC₅₀ value of 0.6 nM (P. falciparum).

WM382 selectively binds PMV and PMX with K_i values of 13.4 μM and 0.035 nM, respectively.

WM382 (1 nM and 100 nM) reminds the time to patent blood infection following injection of 65 h in P. berghei-infected HepG2 in vitro cultures.

In Vivo

WM382 (20 mg/kg twice daily or 1-30 mg/kg once daily; p.o.; for 4 d) can clear mouse models of P. berghei and P. falciparum parasites. WM382 is also efficacious against P. falciparum asexual infection in humanized mice and prevents transmission to mosquitoes.

SOLUBILITY

Soluble in DMSO

In vitro DMSO 5 mg/mL

REFERENCES

[1]. Manuel de LR, et al. The Invention of WM382, a Highly Potent PMIX/X Dual Inhibitor toward the Treatment of Malaria. ACS Med Chem Lett. 2022 Oct 12.

[2]. Hodder AN, et al. Basis for drug selectivity of plasmepsin IX and X inhibition in *Plasmodium falciparum* and *vivax*. *Structure*. 2022 Jul 7;30(7):947-961.e6.

[3]. Favuzza P, et al. Dual Plasmepsin-Targeting Antimalarial Agents Disrupt Multiple Stages of the Malaria Parasite Life Cycle. *Cell Host Microbe*. 2020 Apr 8;27(4):642-658.e12.

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Lot CoA and SDS are separate documents.