# PRODUCT INFORMATION



## Artefenomel

Item No. 30677

CAS Registry No.: 1029939-86-3

Formal Name: 4-[2-(4-cis-dispiro[cyclohexane-1,3'-[1,2,4]

trioxolane-5',2"-tricyclo[3.3.1.1<sup>3,7</sup>]decan]-

4-ylphenoxy)ethyl]-morpholine

Synonym: OZ439 MF: C28H39NO5 FW: 469.6 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### **Laboratory Procedures**

Artefenomel is supplied as a solid. A stock solution may be made by dissolving the artefenomel in the solvent of choice, which should be purged with an inert gas. Artefenomel is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

#### Description

Artefenomel is an ozonide antimalarial agent.<sup>1</sup> It is active against 3D7, Cam3.II, and Cam3.II\_rev P. falciparum strains (LC<sub>50</sub>s = 8.7, 4.4, and 6.1 nM, respectively). Artefenomel reduces the number of trophozoites in P. falciparum-infected isolated human red blood cells (IC<sub>50</sub> = 31 nM).<sup>2</sup> In vivo, artefenomel (30 mg/kg) is 100% curative in a mouse model of P. berghei infection.<sup>3</sup>

### References

- 1. Yang, T., Xie, S.C., Cao, P., et al. Comparison of the exposure time dependence of the activities of synthetic ozonide antimalarials and dihydroartemisinin against K13 wild-type and mutant Plasmodium falciparum strains. Antimicrob. Agents Chemother. 60(8), 4501-4510 (2016).
- 2. Giannangelo, C., Stingelin, L., Yang, T., et al. Parasite-mediated degradation of synthetic ozonide antimalarials impacts in vitro antimalarial activity. Antimicrob. Agents Chemother. 62(3), e01566-e01617
- 3. Kim, H.S., Hammill, J.T., and Guy, R.K. Seeking the elusive long-acting ozonide: Discovery of artefenomel (OZ439). J. Med. Chem. 60(7), 2651-2653 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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