# PRODUCT INFORMATION



## **Piperaquine**

Item No. 20799

**CAS Registry No.:** 4085-31-8

Formal Name: 4,4'-(1,3-propanediyldi-4,1-

piperazinediyl)bis[7-chloro-quinoline

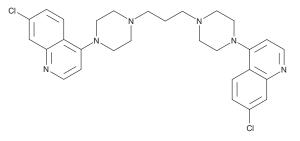
Synonym: Piperaquinoline MF:  $C_{29}H_{32}CI_2N_6$ 

535.5 FW: ≥98% **Purity:** 

UV/Vis.:  $\lambda_{\text{max}}$ : 225, 350 nm Supplied as: A crystalline 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**

Piperaquine is supplied as a crystalline solid. A stock solution may be made by dissolving the piperaquine in the solvent of choice. Piperaquine is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 0.2 mg/ml.

#### Description

Piperaquine is a bis-quinoline compound that inhibits the ex vivo growth of P. falciparum isolates from malaria-infected patients with IC<sub>50</sub>s ranging from 11.8-217.3 nM.<sup>1</sup> Formulations containing piperaquine have been used in combination with artemisinin (Item No. 11816) for the treatment of malaria in HIV-1-positive populations.<sup>2-4</sup>

#### References

- 1. Akoachere, M., Buchholz, K., Fischer, E., et al. In vitro assessment of methylene blue on chloroquine-sensitive and -resistant Plasmodium falciparum strains reveals synergistic action with artemisinins. Antimicrob. Agents Chemother. 49(11), 4592-4597 (2005).
- 2. Askling, H.H., Bruneel, F., Burchard, G., et al. Management of imported malaria in Europe. Malar. J. 11, (2012).
- 3. Henrich, P.P., O'Brien, C., Sáenz, F.E., et al. Evidence for pyronaridine as a highly effective partner drug for treatment of artemisinin-resistant malaria in a rodent model. Antimicrob. Agents Chemother. 58(1), 183-195 (2014).
- 4. Pascual, A., Parola, P., Benoit-Vical, F., et al. Ex vivo activity of the ACT new components pyronaridine and piperaquine in comparison with conventional ACT drugs against isolates of Plasmodium falciparum. Malar. J. 11, (2012).

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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### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM