

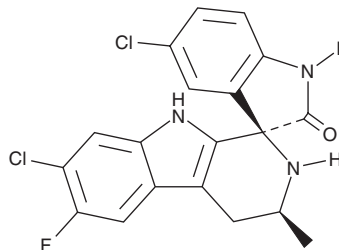
# PRODUCT INFORMATION



## Cipargamin

Item No. 30678

**CAS Registry No.:** 1193314-23-6  
**Formal Name:** (1'R,3'S)-5,7'-dichloro-6'-fluoro-2',3',4',9'-tetrahydro-3'-methyl-spiro[3H-indole-3,1'-[1H]pyrido[3,4-b]indol]-2(1H)-one  
**Synonyms:** KAE609, NITD609  
**MF:** C<sub>19</sub>H<sub>14</sub>Cl<sub>2</sub>FN<sub>3</sub>O  
**FW:** 390.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 229 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

Cipargamin is supplied as a crystalline solid. A stock solution may be made by dissolving the cipargamin in the solvent of choice, which should be purged with an inert gas. Cipargamin is soluble in DMSO.

### Description

Cipargamin is an antimalarial agent.<sup>1-3</sup> It inhibits the Na<sup>+</sup>-ATPase activity of wild-type or mutant *P. falciparum* P-type ATPase (PfATP4; IC<sub>50</sub>s = 12.3-13.9 and 21.1-32.5 nM, respectively, in *P. falciparum* membranes).<sup>1</sup> Cipargamin is active against the *P. falciparum* chloroquine-sensitive strain NF54 and chloroquine-resistant strain K1 (IC<sub>50</sub>s = 0.5 and 0.6 nM, respectively).<sup>2</sup> It reduces parasitemia and increases survival in a mouse model of *P. berghei* infection when administered at doses of 10, 30, and 100 mg/kg.<sup>3</sup>

### References

1. Rosling, J.E.O., Ridgway, M.C., Summers, R.L., *et al.* Biochemical characterization and chemical inhibition of PfATP4-associated Na<sup>+</sup>-ATPase activity in *Plasmodium falciparum* membranes. *J. Biol. Chem.* **293**(34), 13327-13337 (2018).
2. van Pelt-Koops, J.C., Pett, H.E., Graumans, W., *et al.* The spiroindolone drug candidate NITD609 potently inhibits gametocytogenesis and blocks *Plasmodium falciparum* transmission to *Anopheles* mosquito vector. *Antimicrob. Agents Chemother.* **56**(7), 3544-3548 (2012).
3. Rottmann, M., McNamara, C., Yeung, B.K.S., *et al.* Spiroindolones, a potent compound class for the treatment of malaria. *Science* **329**(5996), 1175-1180 (2010).

#### WARNING

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/01/2022

#### 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