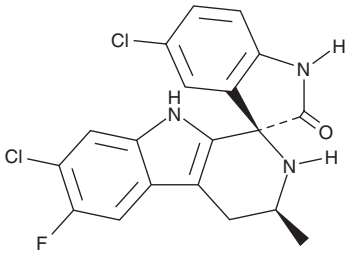
PRODUCT INFORMATION

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:	$C_{19}H_{14}Cl_2FN_3O$
FW:	390.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 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.[1-3] It inhibits the Na^+-ATPase activity of wild-type or mutant *P. falciparum* P-type ATPase (PfATP4; IC_{50}s = 12.3-13.9 and 21.1-32.5 nM, respectively, in *P. falciparum* membranes).[1] Cipargamin is active against the *P. falciparum* chloroquine-sensitive strain NF54 and chloroquine-resistant strain K1 (IC_{50}s = 0.5 and 0.6 nM, respectively).[2] 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.[3]

References

1. Rosling, J.E.O., Ridgway, M.C., Summers, R.L., *et al*. Biochemical characterization and chemical inhibition of PfATP4-associated Na^+-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).

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