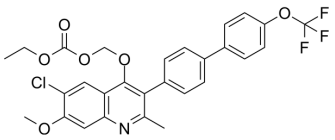
ELQ-598

Cat. No.:	HY-163483
CAS No.:	3023709-99-8
Molecular Formula:	$C_{28}H_{23}ClF_3NO_6$
Molecular Weight:	561.93
Target:	Parasite
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

ELQ-598, as a prodrug, is converted into the active drug ELQ-596 upon oral administration. ELQ-598 demonstrates potent parasitic growth inhibition capabilities (IC_{50}= 37 nM). ELQ-598 also shows low toxicity towards human cells (IC_{50}= 19 μM). ELQ-598 can be used for research into babesiosis[1].

In Vivo

ELQ-598 (10 mg/kg; p.o.; daily DPI 3-7) achieves complete elimination of ***B. duncani*** infection in C3H mice[1].
ELQ-598 (10 mg/kg; p.o.; daily DPI 3-7) is effective at eliminating ***B. microti*** infection in mice[1].
ELQ-598 (10 mg/kg; p.o.; daily DPI 3-7) combined with atovaquone (HY-13832) can eliminative of the infection in the C3H/HeJ mice infected with ***B. duncani*** and SCID mice model infected with ***B. microti***[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C3H mice genetically prone to B. duncani infection[1]
Dosage:	10mg/kg
Administration:	p.o.; daily DPI 3-7
Result:	Resulted in a complete elimination of the parasites. Mice survived for the duration of the study with no recurrence of parasitemia observed.

Animal Model:	C3H/HeJ mice for B. duncani infection, and SCID mice for B. microti infection[1]
Dosage:	10mg/kg with 10mg/kg atovaquone,
Administration:	p.o.; daily DPI 3-7
Result:	All mice survived without any recurrence of parasitemia. A potent synergistic or additive effect of the drug combination in eradicating the lethal infection.This combination strategy offers enhanced efficacy compared to the use of either compound alone.

REFERENCES

[1]. Vydyam P, et al. Effectiveness of Two New Endochin-like Quinolones, ELQ-596 and ELQ-650, in Experimental Mouse Models of Human Babesiosis. ACS Infect Dis. 2024 Apr 12;10(4):1405-1413.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA