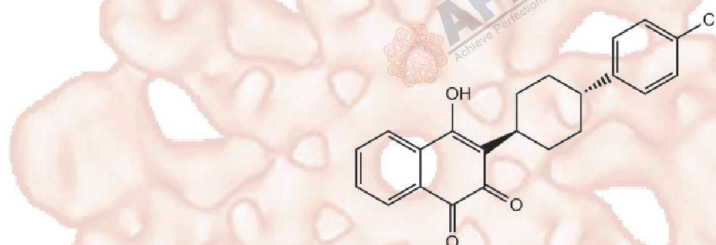


Product Data Sheet

Atovaquone

Cat. No.: B2078
CAS No.: 95233-18-4
Formula: C₂₂H₁₉ClO₃
M.Wt: 366.84
Synonyms:
Target:
Pathway:
Storage: Store at -20°C



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥ 17.03 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.7260 mL	13.6299 mL	27.2598 mL
	5 mM	0.5452 mL	2.7260 mL	5.4520 mL
	10 mM	0.2726 mL	1.3630 mL	2.7260 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary

unique naphthoquinone with broad-spectrum antiprotozoal activity

IC₅₀ & Target

In Vitro

Cell Viability Assay

Preparation method:

The solubility of this compound in DMSO is >17.03 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.

Reacting conditions:

0 ~ 3.2 μ M

Applications:

The Σ FICs against WT *B. gibsoni* were 0.93, 0.82, 0.83 and 0.96 for

	Atovaquone and Proguanil at a ratio of 4:1, 3:2, 2:3 and 1:4, respectively. The Σ FICs against Atovaquone-resistant <i>B. gibsoni</i> were 0.88, 0.60, 0.77 and 0.88 at each ratio. The results implied that Atovaquone synergized the effects of Proguanil on WT and Atovaquone-resistant <i>B. gibsoni</i> .	
In Vivo	Animal experiment	
	Animal models:	Dogs infected with <i>B. gibsoni</i>
	Dosage form:	17 ~ 25 mg/kg; p.o.
	Applications:	In <i>B. gibsoni</i> -infected dogs, the combination of Atovaquone and Proguanil alleviated parasitemia. However, all dogs showed relapse of parasitic infection. In addition, some side effects were also observed. Self-limiting vomiting occurred in 2 dogs and hyperphosphatasia occurred in another dog. Mild increases in the alanine aminotransferase levels were confirmed in 2 dogs.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Iguchi A, Matsuu A, Fujii Y, Ikadai H, Hikasa Y. The in vitro interactions and in vivo efficacy of atovaquone and proguanil against *Babesia gibsoni* infection in dogs. *Vet Parasitol.* 2013 Nov 8;197(3-4):527-33.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEXBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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