

Product Name:	Artesunate
Product Number:	A096
CAS Number:	88495-63-0
Molecular Formula:	C ₁₉ H ₂₈ O ₈
Molecular Weight:	384.42
Form:	Powder
Appearance:	White crystalline powder
Solubility:	Slightly soluble in water, freely soluble in ethanol, acetone, and chloroform
Source:	<i>Artemisia annua</i>
pH:	3.5 - 5.0
Melting Point:	132°C - 136°C
Optical Rotation:	+4.5 - +6.5
Storage Conditions:	≤30°C
Description:	Artesunate is an anti-malarial drug and has been found to be effective against multidrug-resistant <i>Plasmodium falciparum</i> and <i>P. vivax</i> malaria. Artesunate has also been found to have anti-cancer activity against leukemia and colon cancer cell lines.
Mechanism of Action:	Artesunate causes double stranded breaks in parasite DNA which leads to a buildup of intracellular reactive oxygen species (ROS).
Spectrum:	Artesunate is active against <i>Plasmodium falciparum</i> and <i>P. vivax</i> .
References:	<p>Efferth, Thomas, Heather Dunstan, Axel Sauerbrey, Hayato Miyachi, and Christopher Chitambar. "The Anti-malarial Artesunate Is Also Active against Cancer." <i>Int J Oncol International Journal of Oncology</i> (2001): n. pag. Web.</p> <p>Gopalakrishnan, Anusha M., and Nirbhay Kumar. "Antimalarial Action of Artesunate Involves DNA Damage Mediated by Reactive Oxygen Species." <i>Antimicrobial Agents and Chemotherapy Antimicrob. Agents Chemother.</i> 59.1 (2014): 317-25. Web.</p>