Artemisinin

Multifaceted Nutritional Support

Item # 72160
Available in bottles of 90 capsules

"I am extremely satisfied with the superb quality of your product and the excellent clinical results we witness daily from its use." - Christopher Deatherage, N.D., Brush Creek Naturopathic Health Center, Drury, MO

"Artemisinin is a powerful oxidant. I have used it orally along with herbal extracts, such as berberine, grapefruit seed extract and oregano oil as a treatment for intestinal microbial imbalance." - Leo Galland, M.D.

"I have been very impressed by the efforts of ARG to perform both purity analysis and activity analysis on its artemisinin. For me, it was not even necessary, since I had already observed the awesome clinical efficacy of the product in patient after patient. I am grateful that this product is available and at a most reasonable price." - Robert Jay Rowen, M.D., Editor-in-Chief, Second Opinion

Description

Pure artemisinin, or Qinghaosu, is the active constituent of the herb *Artemesia annua* (sweet wormwood). Good quality *Artemesia annua* contains 0.3-0.5% artemisinin, so pure Artemisinin provides hundreds of times more of the active constituent artemisinin than the whole herb itself. Research has show Artemisinin to be particularly beneficial in balancing the microbiology of the GI tract.

Our Artemisinin has had independent cell tests verifying its effectiveness, and we do independent potency assays on every batch, using HPLC. In addition, we have received excellent feedback from numerous practitioners who utilize Artemisinin in their practice.

Each (1) capsule contains:	100 mg Artemisinin
Other ingredients:	Cellulose, magnesium stearate.
Suggested use:	As a dietary supplement, 1-2 capsules one or two times daily before meals, or as directed by a healthcare practitioner.

Caution: Contraindicated for pregnant or nursing women. Artemisinin produces an oxidizing effect in the stomach and intestines. Long-term administration (greater than 2 or 3 months) should be monitored by a healthcare practitioner. Combining with antioxidants or iron may theoretically decrease effectiveness. Detoxification reactions may be experienced by some individuals.

THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.

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References

Ames JR, Ryan MD, et al. Charge transfer and oxy radicals in antimalarial action. J. Free Rad Biol. Med 1985, 1:353-61.

Beekman AC, Wierenga PK, Woerdenbag HJ, Van Uden W, Pras N, Konings AW, el-Feraly FS, Galal AM, Wikstrom HV. Artemisinin-derived sesquiterpene lactones as potential antitumour compounds: cytotoxic action against bone marrow and tumour cells. Planta Med. 1998 Oct;64(7):615-9.

Beekman AC, Woerdenbag HJ, Van Uden W, Pras N, Konings AW, Wikstrom HV. Stability of artemisinin in aqueous environments: impact on its cytotoxic action to Ehrlich ascites tumour cells. J Pharm Pharmacol. 1997 Dec;49(12):1254-8.

Bharel S, Gulati M, Abdin P, Srivastava S. Structure biosynthesis and functions of artemisinin. Fitoterapia Vol LXVII No 5, l996.

Borstnik K, Paik I, Shapiro TA, Posner GH. Antimalarial chemotherapeutic peroxides: artemisinin, yingzhaosu A and related compounds. Int J Parasitol. 2002 Dec;32(13):1661-7.

China Cooperative Research Group on Qinghaosu and its Derivatives as Antimalarials. J. Trad. Chin. Med 2, 17, 1982.

Efferth T, Dunstan H, Sauerbrey A, Miyachi H, Chitambar CR. Antimalarial artesunate is also active against cancer, Oncol. 2001, Apr;18(4):767-73.

Efferth T, Olbrich A, Bauer R. mRNA expression profiles for the response of human tumor cell lines to the antimalarial drugs artesunate, arteether, and artemether. Biochem Pharmacol. 2002 Aug 15;64(4):617-23.

Fishwick J, Edwards G, Ward SA, McLean WG. Morphological and immunocytochemical effects of dihydroartemisinin on differentiating NB2a neuroblastoma cells. Neurotoxicology. 1998 Jun;19(3):393-403.

Gulati A, Bharel S, Srivastava M, Abdin MZ. Experimental Studies on Artemisia, an herbal remedy for malaria. Fitoterapia Vol LXV11 No 5, 1996.

Keith Arnold, Tran Tinh Hien, et al. A randomized comparative study of artemisinine suppositories and oral quinine in acute falciparum Malaria.4. Transactions of the Royal Society of Tropical Medicine and Hygiene (1990) 84:499-502.

Klayman D. Qinghaosu (Artemisinin): Antimalarial Drug from China. Science, 1985, Vol. 238, May 31, p.1049

Krungkrai SR, Yuthavong. The antimalarial action of Plasmodium falciparum of qinghaosu and artesunate in combination with agents which modulate oxidant stress. Trans. R Soc. Trop. Med Hyg 1987, 81:710-4.

Lee CH, Hong H, Shin J, Jung M, Shin I, Yoon J, Lee W. NMR studies on novel antitumor drug candidates, deoxoartemisinin and carboxypropyldeoxoartemisinin. Biochem Biophys Res Commun. 2000 Aug 2;274(2):359-69.

Levander OA, Ager AL, Morris VC. Qinghaosu, dietary vitamin E, selenium and cod liver oil: effect on susceptibility of mice to the malarial parasite Plasmodium yoelii. Am.J. Clin. Nutr. 1989; 5:346-52.

Lu L. [Study on effect of Cordyceps sinensis and artemisinin in preventing recurrence of lupus nephritis] Zhongguo Zhong Xi Yi Jie He Za Zhi. 2002 Mar;22(3):169-71. Chinese.

McLean WG, Ward SA. In vitro neurotoxicity of artemisinin derivatives. Med Trop (Mars). 1998;58(3 Suppl):28-31.

Meshnick SR. Artemisinin: mechanisms of action, resistance and toxicity. Int J Parasitol. 2002 Dec;32(13):1655-60.

Moore JC, Lai H, Li JR, Ren RL, McDougall JA, Singh NP, Chou CK. Oral administration of dihydroartemisinin and ferrous sulfate retarded implanted fibrosarcoma growth in the rat. Cancer Lett. 1995 Nov 27;98(1):83-7.

Mturi N, Musumba C, Wamola B, Ogutu B, Newton C. Cerebral malaria: optimising management. CNS Drugs. 2003;17(3):153-65.

Mukanganyama S, Widersten M, Naik YS, Mannervik B, Hasler JA. Inhibition of glutathione S-transferases by antimalarial drugs possible implications for circumventing anticancer drug resistance. Int J Cancer. 2002 Feb 10;97(5):700-5.

Phan GT, de Vries PJ, Tran BQ, Le HQ, Nguyen NV, Nguyen TV, Heisterkamp SH, Kager PA. Artemisinin or chloroquine for blood stage Plasmodium vivax malaria in Vietnam. Trop Med Int Health. 2002 Oct;7(10):858-64.

Posner GH, Northrop J, Paik IH, Borstnik K, Dolan P, Kensler TW, Xie S, Shapiro TA. New chemical and biological aspects of artemisinin-derived trioxane dimers. Bioorg Med Chem. 2002 Jan;10(1):227-32.

Posner GH, Paik IH, Sur S, McRiner AJ, Borstnik K, Xie S, Shapiro TA. Orally Active, Antimalarial, Anticancer, Artemisinin-Derived Trioxane Dimers with High Stability and Efficacy. J Med Chem. 2003 Mar 13;46(6):1060-1065.

Posner GH, Ploypradith P, Parker MH, O'Dowd H, Woo SH, Northrop J, Krasavin M, Dolan P, Kensler TW, Xie S, Shapiro TA. Antimalarial, antiproliferative, and antitumor activities of artemisinin-derived, chemically robust, trioxane dimers. J Med Chem. 1999 Oct 21;42(21):4275-80.

Reungpatthanaphong P, Mankhetkorn S. Modulation of multidrug resistance by artemisinin, artesunate and dihydroartemisinin in K562/adr and GLC4/adr resistant cell lines. Biol Pharm Bull. 2002 Dec;25(12):1555-61.

Sidhu AB, Verdier-Pinard D, Fidock DA. Chloroquine resistance in Plasmodium falciparum malaria parasites conferred by pfcrt mutations. Science 2002 Oct 4;298(5591):210-3.

Singh NP, Lai H. Selective toxicity of dihydroartemisinin and holotransferrin toward human breast cancer cells. Life Sci. 2001 Nov 21;70(1):49-56.

Smith H, Crandall I, et al. Optimization and inhibition of the adherent ability of Plasmodium falciparum-infected erythrocytes. Mem Inst Oswaldo Cruz. 1992;87 Suppl 3:303-12.

Smith SL, Maggs JL, Edwards G, Ward SA, Park BK, McLean WG. The role of iron in neurotoxicity: a study of novel antimalarial drugs. Neurotoxicology. 1998 Aug-Oct;19(4-5):557-9.

Stermitz FR, Scriven LN, Tegos G, Lewis K. Two flavonols from Artemisa annua which potentiate the activity of berberine and norfloxacin against a resistant strain of Staphylococcus aureus. Planta Med. 2002 Dec;68(12):1140-1.

Sun WC, Han JX, Yang WY, Deng DA, Yue XF. [Antitumor activities of 4 derivatives of artemisic acid and artemisinin B in vitro] Zhongguo Yao Li Xue Bao. 1992 Nov;13(6):541-3. Chinese.

Walgate R. New malaria drug candidate could cure in a single dose. Bull World Health Organ. 2002;80(8):685-6.

White NJ, Pongtavornpinyo W. The de novo selection of drug-resistant malaria parasites. Proc R Soc Lond B Biol Sci. 2003 Mar 7;270(1514):545-54.

Wilairatana P, Krudsood S, Treeprasertsuk S, Chalermrut K, Looareesuwan S. The future outlook of antimalarial drugs and recent work on the treatment of malaria. Arch Med Res. 2002 Jul-Aug;33(4):416-21.

Woerdenbag HJ, Moskal TA, Pras N, Malingre TM, el-Feraly FS, Kampinga HH, Konings AW. Cytotoxicity of artemisinin-related endoperoxides to Ehrlich ascites tumor cells. J Nat Prod. 1993 Jun;56(6):849-56.

Wong JW, Yuen KH, Nagappan S, Shahul WS, et al. Therapeutic equivalence of a low dose artemisinin formulation in falciparum malaria patients. J Pharm Pharmacol. 2003 Feb;55(2):193-8.

Zhai ZL, Xiao SH. [The antimalarial mechanism of artemisinin and its derivatives] Zhongguo Ji Sheng Chong Xue Yu Ji Sheng Chong Bing Za Zhi. 2001;19(3):182-5. Chinese.

Zhang JT. New drugs derived from medicinal plants. Therapie. 2002 Mar-Apr;57(2):137-50.

Zheng GQ. Cytotoxic terpenoids and flavonoids from Artemisia annua. Planta Med. 1994 Feb;60(1):54-7.

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