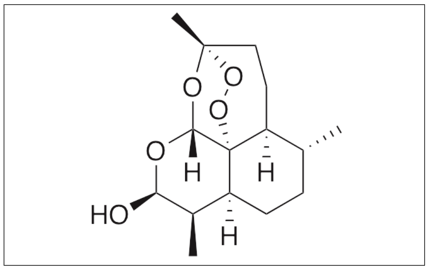
LKT Laboratories, Inc.

Dihydroartemisinin

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information



Product ID A6979

CAS No. 71939-50-9

Chemical Name

Synonym Dihydroartemisinine, Dihydroqinghaosu, (3R,5aS,6R,8aS,9R,10S,12R,12aR)-Decahydro-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin-10-ol

Formula $C_{15}H_{24}O_5$

Formula Wt. 284.35

Melting Point 140°C

Purity ≥96%

Solubility Insoluble in water. Soluble in acetone and ethanol.

Bulk quanitites available upon request

Product ID	Size
A6979	50 mg
A6979	100 mg
A6979	500 mg
A6979	1 g

Store Temp Ambient

Ship Temp Ambient

Description Dihydroartemisinin is a sesquiterpene lactone that can be derived from *Artemisia*. Dihydroartemisinin exhibits anticancer, antiviral, anti-inflammatory, anti-asthma, and anti-parasitic activities. Artemisinins such as dihydroartemisinin are best known for their antimalarial activity. Dihydroartemisinin induces apoptosis in colorectal cancer cells, increasing levels of ROS and Bax; it also inhibits mTORC1 in rhabdomyosarcoma cells. Dihydroartemisinin displays antimicrobial activity against *Plasmodium*, *Schistosoma*, and human cytomegalovirus. This compound also decreases levels of inflammatory cells, Th2 cytokines, IgE, and mucus secretion, suppressing airway hyper-responsiveness in animal models of asthma.

References

Ontikatze T, Rudner J, Handrick R, et al. Dihydroartemisinin is a Hypoxia-Active Anti-Cancer Drug in Colorectal Carcinoma Cells. Front Oncol. 2014 May 19;4:116. PMID: 24904829.

Wanzira H, Kakuru A, Arinaitwe E, et al. Longitudinal Outcomes in a Cohort of Ugandan Children Randomized to Artemether-lumefantrine Versus Dihydroartemisinin-piperaquine for the Treatment of Malaria. Clin Infect Dis. 2014 May 13. [Epub ahead of print]. PMID: 24825870.

Li HJ, Xu FL, Wang YH, et al. Dihydroartemisinin: a new story of an old drug against Schistosoma mansoni infection. Parasitol Res. 2014 Jan;113(1):239-41. PMID: 24146209.

Flobinus A, Taudon N, Desbordes M, et al. Stability and antiviral activity against human cytomegalovirus of artemisinin derivatives. J Antimicrob Chemother. 2014 Jan;69(1):34-40. PMID: 24003183.

Odaka Y, Xu B, Luo Y, et al. Dihydroartemisinin inhibits the mammalian target of rapamycin-mediated signaling pathways in tumor cells. Carcinogenesis. 2014 Jan;35(1):192-200. PMID: 23929438.

Wei M, Xie X, Chu X, et al. Dihydroartemisinin suppresses ovalbumin-induced airway inflammation in a mouse allergic asthma model. Immunopharmacol Immunotoxicol. 2013 Jun;35(3):382-9. PMID: 23635079.