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## **Product Information**

Product ID C4657

CAS No. 23593-75-1

Chemical Name 1-[(2-Chlorophenyl)-diphenylmethyl]-1H-imidazole

Synonym Canesten, Canifug, Lotrimin, Mycosporin, Rimazole, Trimysten

Purity ≥97%

Solubility Soluble in acetone; chloroform;

ethyl acetate and DMF. Slightly soluble in water, benzene and

toluene.

Store Temp Ambient Ship Temp Ambient

**Description** Clotrimazole is an imidazole antifungal that also exhibits anti-parasitic, antimalarial, and anticancer chemotherapeutic

activities. Clotrimazole inhibits synthesis of ergosterol and other sterols, preventing fungal cell wall formation; it also inhibits the H+/K+ ATPase and the Na+/K+ ATPase. In vivo and in vitro, clotrimazole induces G0/G1 cell cycle arrest, decreases the Bcl

-2:Bax ratio, stimulates apoptosis, and inhibits proliferation and tumor growth. Additionally, this compound inhibits

degradation of heme, inducing hemolysis and suppressing growth of *Plasmodium* in vitro. TEST!!!!!!

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## **Pricing and Availability**

Bulk quanitites available upon request

Product ID	Size	List Price
C4657	5 g	\$52.50
C4657	10 g	\$90.00
C4657	25 g	\$180.00

References Wang J, Jia L, Kuang Z, et al. The in vitro and in vivo antitumor effects of clotrimazole on oral squamous cell carcinoma. PLoS One. 2014 Jun 3;9(6):e98885. PMID: 24892421.

Witzke A, Lindner K, Munson K, et al. Inhibition of the gastric H,K-ATPase by clotrimazole. Biochemistry. 2010 Jun 1;49 (21):4524-32. PMID: 20423050.

Huy NT, Takano R, Hara S, et al. Enhancement of heme-induced membrane damage by the anti-malarial clotrimazole: the role of colloid-osmotic forces. Biol Pharm Bull. 2004 Mar;27(3):361-5. PMID: 14993803.

Plempel M. On the action kinetics of clotrimazole. Chemotherapy. 1982;28 Suppl 1:22-31. PMID: 6761084.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.