



LKT Laboratories, Inc.

## Bifonazole

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### Product Information

**Product ID** B3320

**CAS No.** 60628-96-8

**Chemical Name** 1-([1,1'-Biphenyl]-4-yl-phenylmethyl)-1H-imidazole

**Synonym** Amycor, Bedriol, Mycospor, Mycosporan

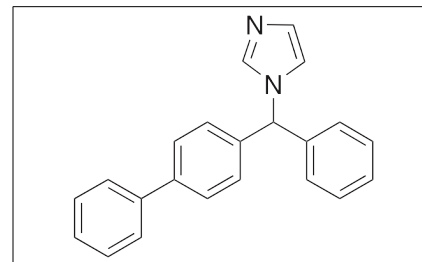
**Formula** C<sub>22</sub>H<sub>18</sub>N<sub>2</sub>

**Formula Wt.** 310.39

**Melting Point** 142 °C

**Purity** ≥98%

**Solubility** Soluble in alcohols, DMF or DMSO.



### Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
B3320	1 g	\$47.60
B3320	5 g	\$118.90
B3320	25 g	\$382.50

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Bifonazole is an imidazole antifungal that also exhibits anticancer activity. Bifonazole inhibits calmodulin, HMG-CoA reductase, and 14- $\alpha$  demethylase in fungi such as dermatophytes. Bifonazole also decreases cell viability and induces Ca<sup>2+</sup>-dependent apoptosis in prostate cancer cells and melanoma cells.

**References** Cheng JS, Chou CT, Liang WZ, et al. The mechanism of bifonazole-induced [Ca<sup>2+</sup>]<sub>i</sub> rises and non-Ca<sup>2+</sup>-triggered cell death in PC3 human prostate cancer cells. J Recept Signal Transduct Res. 2014 May 22;1-7. PMID: 24849495.

Penso J, Beitner R. Clotrimazole and bifonazole detach hexokinase from mitochondria of melanoma cells. Eur J Pharmacol. 1998 Jan 19;342(1):113-7. PMID: 9544799.

Hegemann L, Toso SM, Lahijani KI, et al. Direct interaction of antifungal azole-derivatives with calmodulin: a possible mechanism for their therapeutic activity. J Invest Dermatol. 1993 Mar;100(3):343-6. PMID: 8440921.

Berg D, Regel E, Harenberg HE, et al. Bifonazole and clotrimazole. Their mode of action and the possible reason for the fungicidal behaviour of bifonazole. Arzneimittelforschung. 1984;34(2):139-46. PMID: 6372801.

Kawakami K, Harada T, Yoshihashi Y, et al. Correlation between glass-forming ability and fragility of pharmaceutical compounds. J Phys Chem B. 2015 Apr 9;119(14):4873-4880. PMID: 25781503.

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