



## Product Information

Product ID B1755

CAS No. 51-17-2

Chemical Name

Synonym

Formula  $C_7H_6N_2$

Formula Wt. 118.14

Melting Point 170-172 °C

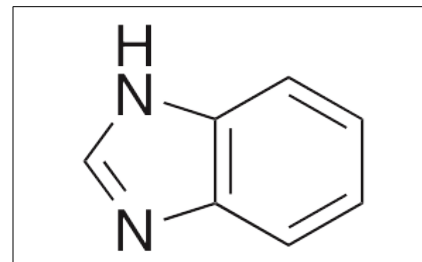
Purity ≥98%

Solubility

Store Temp Ambient

Ship Temp Ambient

**Description** Benzimidazole is an organic compound that displays some anticancer benefit. Complexes of Cu(II) and benzimidazole bind to the minor groove of DNA, cleave supercoiled DNA, and inhibit topoisomerase I, inhibiting proliferation across several cancer cell lines. Additionally, benzimidazole derivatives are well known for their anti-parasitic, antifungal, and antibacterial activities. Benzimidazoles often inhibit microtubule polymerization. TEST!!!!!!



## Pricing and Availability

*Bulk quantities available upon request*

Product ID	Size	List Price
B1755	5 g	\$27.00
B1755	50 g	\$44.80
B1755	250 g	\$180.00

**References** Song WJ, Cheng JP, Jiang DH, et al. Synthesis, interaction with DNA and antiproliferative activities of two novel Cu(II) complexes with Schiff base of benzimidazole. Spectrochim Acta A Mol Biomol Spectrosc. 2013 Oct 14;121C:70-76. PMID: 24220672

Molecular basis for benzimidazole resistance from a novel  $\beta$ -tubulin binding site model.

Aguayo-Ortiz R, Méndez-Lucio O, Romo-Mancillas A, Castillo R, Yépez-Mulia L, Medina-Franco JL, Hernández-Campos A. J Mol Graph Model. 2013 Sep;45:26-37. PMID: 23995453.

Khabnadideh S, Rezaei Z, Pakshir K, et al. Synthesis and antifungal activity of benzimidazole, benzotriazole and aminothiazole derivatives. Res Pharm Sci. 2012 Apr;7(2):65-72. PMID: 23181082.

Arjmand F, Parveen S, Afzal M, et al. Synthesis, characterization, biological studies (DNA binding, cleavage, antibacterial and topoisomerase I) and molecular docking of copper(II) benzimidazole complexes. J Photochem Photobiol B. 2012 Sep 3;114:15-26. PMID: 22695227.

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