

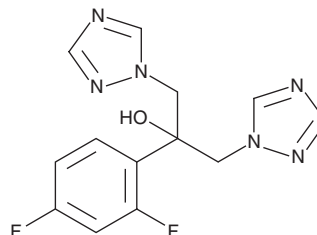
PRODUCT INFORMATION



Fluconazole

Item No. 11594

CAS Registry No.: 86386-73-4
Formal Name: α -(2,4-difluorophenyl)- α -(1H-1,2,4-triazol-1-ylmethyl)-1H-1,2,4-triazole-1-ethanol
Synonym: UK 49858
MF: C₁₃H₁₂F₂N₆O
FW: 306.3
Purity: \geq 98%
UV/Vis.: λ_{max} : 261 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Fluconazole is supplied as a crystalline solid. A stock solution may be made by dissolving the fluconazole in the solvent of choice, which should be purged with an inert gas. Fluconazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of fluconazole in these solvents is approximately 20, 33, and 16 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of fluconazole can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of fluconazole in PBS, pH 7.2, is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Fluconazole is a triazole antifungal agent that is effective against most *Candida* strains.¹ *In vivo* fluconazole at 0.5-100 mg/kg demonstrates protective activity in various experimental animal models of systemic fungal diseases including aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, cryptococcosis, and histoplasmosis.²

References

- Herbrecht, R., Nivoix, Y., Fohrer, C., *et al.* Management of systemic fungal infections: Alternatives to itraconazole. *J. Antimicrob. Chemother.* **56**, i39-i48 (2005).
- Saag, M.S. and Dismukes, W.E. Azole antifungal agents: Emphasis on new triazoles. *Antimicrob. Agents Chemother.* **32(1)**, 1-8 (1988).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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