

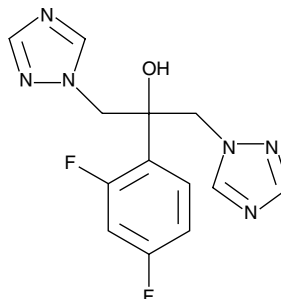
Product Information



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
Synonyms: Diflucan, Difluconazole, Fungicon, UK 49858
MF: $C_{13}H_{12}F_2N_6O$
FW: 306.3
Purity: $\geq 98\%$
Stability: ≥ 2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} : 261 nm



Laboratory Procedures

For long term storage, we suggest that fluconazole be stored as supplied at -20°C . It should be stable for at least two years.

Fluconazole is supplied as a crystalline solid. A stock solution may be made by dissolving the fluconazole in the solvent of choice. Fluconazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. 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.

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).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/11594

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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