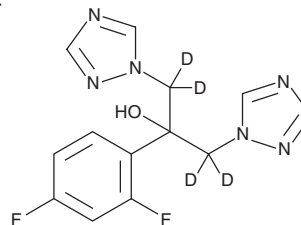


# PRODUCT INFORMATION



## Fluconazole-d<sub>4</sub> Item No. 18252

**CAS Registry No.:** 1124197-58-5  
**Formal Name:** α-(2,4-difluorophenyl)-α-(1H-1,2,4-triazol-1-ylmethyl-d<sub>2</sub>)-1H-1,2,4-triazole-1-ethan-β,β-d<sub>2</sub>-ol  
**MF:** C<sub>13</sub>H<sub>8</sub>D<sub>4</sub>F<sub>2</sub>N<sub>6</sub>O  
**FW:** 310.3  
**Chemical Purity:** ≥98% (Fluconazole)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Fluconazole-d<sub>4</sub> is intended for use as an internal standard for the quantification of fluconazole (Item No. 11594) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Fluconazole-d<sub>4</sub> is supplied as a solid. A stock solution may be made by dissolving the fluconazole-d<sub>4</sub> in the solvent of choice. Fluconazole-d<sub>4</sub> is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas.

### Description

Fluconazole is a triazole antifungal agent that is effective against most *Candida* strains.<sup>1</sup> *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.<sup>2</sup>

### References

- Herbrecht, R., Nivoix, Y., Fohrer, C., *et al.* Management of systemic fungal infections: Alternatives to itraconazole. *J. Antimicrob. Chemother.* **56(Suppl 1)**, 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.

#### WARRANTY AND LIMITATION OF REMEDY

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