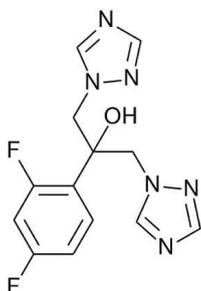
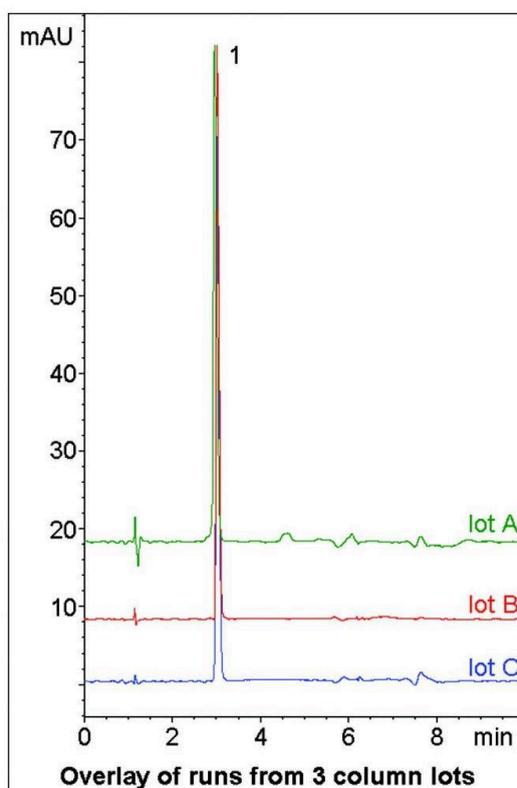


## Fluconazole Tablet Analyzed with HPLC - AppNote

### Assay Method for Amine Containing API

This Application Note shows a simple Gradient Method for Assay of Fluconazole Tablets. In Reversed Phase HPLC, notable tailing was observed due to the two heterocyclic amine groups. Use of Aqueous Normal Phase (ANP) HPLC produced a sharp Peak for this API. Data from three different Column lots is shown in order to demonstrate the Method Reproducibility and Robustness.



**Peak:**

Fluconazole

### Method Conditions

**Column:** Cogent Diamond Hydride™, 4 μm, 100 Å

**Catalog No.:** 70000-7.5P

**Dimensions:** 4.6 x 75 mm

**Mobile Phase:**

- A: DI Water with 0.1% Formic Acid (v/v)  
B: Acetonitrile with 0.1% Formic Acid (v/v)

**Gradient:**

Time (minutes)	%B
0	95
1	95
6	40
7	40

**Post Time:** 3 minutes

**Injection vol.:** 1 µL

**Flow rate:** 1.0 mL / minute

**Detection:** UV @ 260 nm

**Sample Preparation:** 150 mg strength Fluconazole Tablet was ground and added to 50 mL volumetric flask containing 25 mL 50:50 Solvent A / Solvent B diluent. The solution was sonicated 10 minutes, diluted to mark, and mixed. A portion was filtered through a 0.45 µm Nylon Syringe Filter (MICROSOLV Tech Corp.).

**t<sub>o</sub>:** 0.9 minutes

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**Note:** Fluconazole is a triazole antifungal drug. Its mode of action is inhibition of fungal Cytochrome P450 enzyme 14a-demethylase. It is available under the trade name Diflucan®.

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