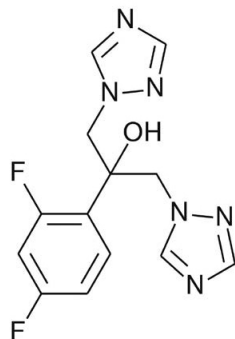
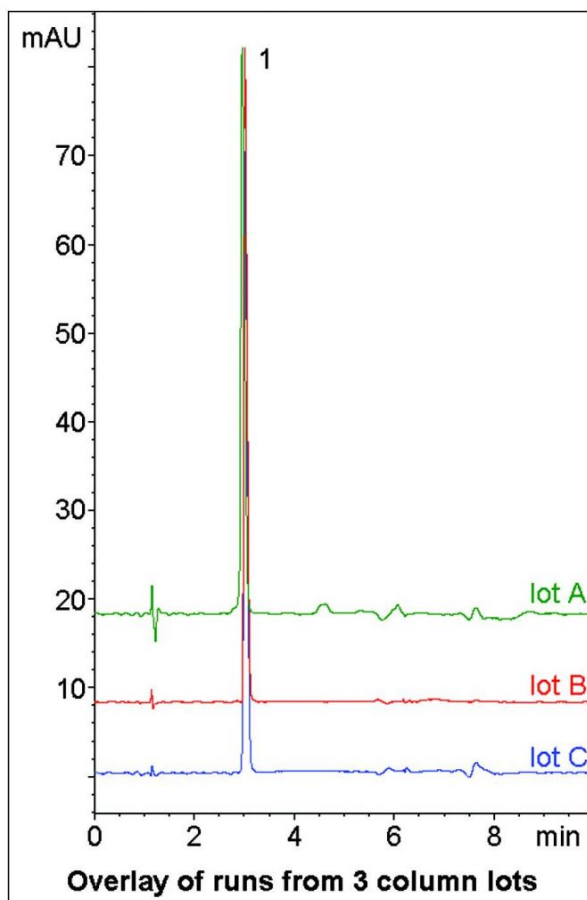


Fluconazole Tablet Analyzed with HPLC - AppNote

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™, 4µm, 100Å

Catalog No.: 70000-7.5P

Dimensions: 4.6 x 75mm

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.: 1µL

Flow rate: 1.0mL / minute

Detection: UV @ 260nm

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

t₀: 0.9 minutes

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®.



Attachment

No 255 Fluconazole Tablet Analyzed with HPLC pdf 0.4 Mb