

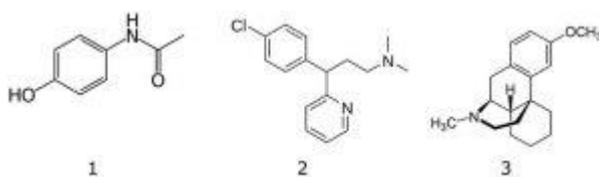
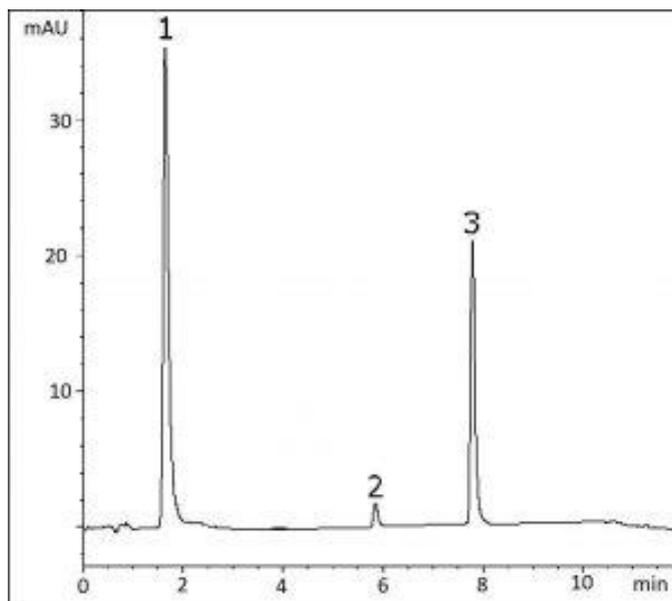
Acetaminophen, Dextromethorphan and Chlorpheniramine Tablet - AppNote

Acetaminophen, Dextromethorphan, and Chlorpheniramine

Click [HERE](#) for Column Ordering Information.

This Method demonstrates the potential of the Cogent Phenyl Hydride 2.0™ Column for analysis of amine-containing analytes in a real formulation. Chlorpheniramine and Dextromethorphan can often be problematic in terms of peak tailing due to the tertiary amines, but this column and method produces excellent peak shapes for both compounds in this tablet formulation.

A high UV wavelength of 310 nm was chosen at the beginning of the gradient in order to reduce the Acetaminophen peak height, since this analyte is present in much higher concentration than the other two.



Peaks:

1. Acetaminophen
2. Chlorpheniramine
3. Dextromethorphan

Method Conditions

Column: Cogent Phenyl Hydride 2.0™, 2.2µm, 120Å

Catalog No.: [69220-05P-2](#)

Dimensions: 2.1 x 50 mm

Mobile Phase:

A: DI Water / 0.1% Trifluoroacetic Acid (TFA) (v/v)

B: Acetonitrile / 0.1% Trifluoroacetic Acid (TFA) (v/v)

Time (minutes)	%B
0	5
2	5
9	80
11	80
12	5

Post Time: 5 minutes

Injection vol.: 1µL

Flow rate: 0.3mL / minute

Detection: UV @ 310nm (0-2 min), @ 265 nm (2-12 min)

t₀: 0.7 minutes

Samples: Coricidin High Blood Pressure (HBP) Night® tablet containing 500mg Acetaminophen, 15mg Dextromethorphan HBr, and 2mg Chlorpheniramine maleate was ground and added to a 50mL volumetric flask. A portion of 50/50 solvent A/solvent B was added and the flask was sonicated for 10 minutes. Solution was then diluted to mark and mixed well. A portion was filtered with a 0.45µm Nylon Syringe Filter (MICROSOLV Tech Corp.). This filtrate was used for injections and peak identities were confirmed with individual standards.



Attachment: No 324 Coricidin HBP Night Tablet pdf 0.2 Mb [Download File](#)

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