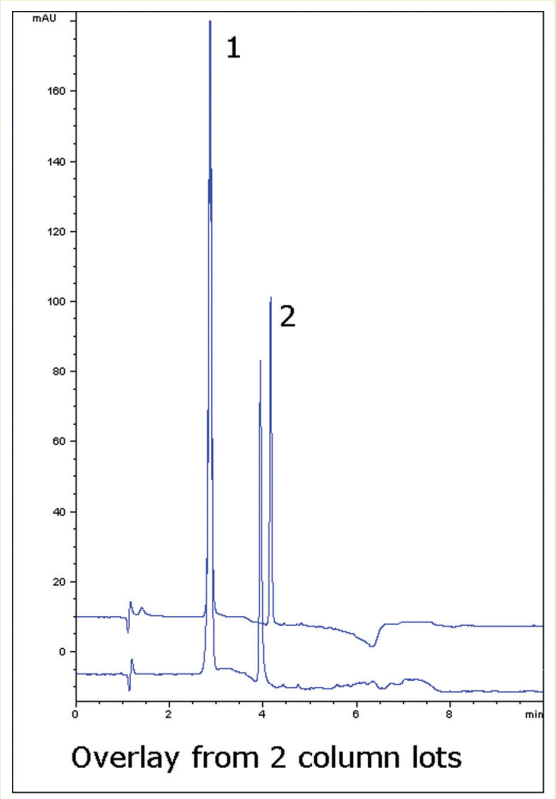
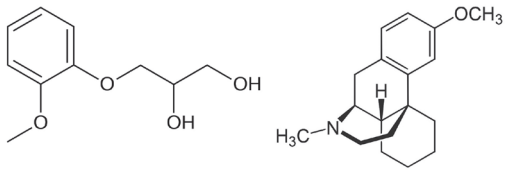
# Coricidin HBP Day® Tablet

## Formulation of guaifenesin and dextromethorphan HBr

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**Note:** Guaifenesin is an expectorant agent and dextromethorphan is an antitussive. This particular cold and cough formulation is designed for individuals with high blood pressure.

## Method Conditions

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

**Catalog No.:** 69020-75P

**Dimensions:** 4.6 x 75 mm

**Solvents:** A: DI $H_2O$ / 0.1% TFA (v/v)
B: Acetonitrile / 0.1% TFA (v/v)

**Gradient:**

| time (min.) | %B |
|---|---|
| 0 | 20 |
| 1 | 20 |
| 5 | 90 |
| 6 | 20 |

**Temperature:** 35˚C

**Post Time:** 4 min

**Flow rate:** 1.0 mL/min

**Detection:** UV 254 nm (0-3.5 min), 215 nm (3.5-10 min)

**Injection vol.:** 2µL

**Sample:** Coricidin High Blood Pressure (HBP) Day tablet containing 200mg guaifenesin and 10mg dextromethorphan HBr 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 10 min. Then it was 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. The peak identities were confirmed with individual standards.

**Peaks:** 1. Guaifenesin
2. Dextromethorphan

**$t_0$:** 0.9 min

## Discussion

This method shows the separation of two active ingredients in a formulation of guaifenesin and dextromethorphan. Dextromethorphan often exhibits tailing in many HPLC methods, but here an excellent peak shape is observed. The method is suitable for routine assay of these compounds in combination formulations.

A change in wavelength was used in this method in order to obtain similar peak heights between the two compounds, since their concentrations differ significantly.



MANUFACTURED BY:
MICROSOLV TECHNOLOGY CORPORATION
9158 Industrial Blvd NE
Leland, NC 28451
p: 1.732.380.8900
f: 1.910.769.9435
customers@mtc-usa.com
www.Cogent-HPLC.com