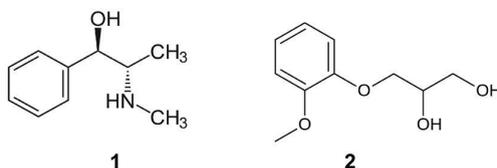
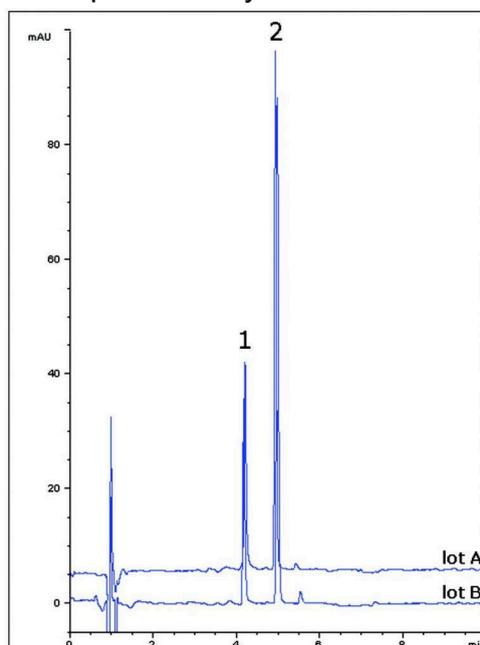


Ephedrine, Guaifenesin in Primatene Tablet Analyzed with HPLC - AppNote

Separation of Guaifenesin and Ephedrine from an OTC Formulation

These two compounds are used together in the Primatene® formulation for the purpose of treating Bronchial Asthma. The Separation obtained illustrates the application of this Method in the Analysis of an Over the Counter Formulation.

A wavelength change was used in order to make the two peak heights more comparable (*there is much more Guaifenesin than Ephedrine in the tablet*). Data from two different Column lots is shown in the figure in order to demonstrate the reproducibility of this Method.



Peaks:

1. Ephedrine, 2. Guaifenesin

Method Conditions

Column: Cogent Bidentate C18™, 4 μm, 100Å

Catalog No.: 40018-75P

Dimensions: 4.6 x 75 mm

Mobile Phase:

A: DI Water with 0.1% TFA (v/v)
B: Acetonitrile with 0.1% TFA (v/v)

Gradient:

Time (minutes)	%B
0	5
1	5
6	50
7	5

Post Time: 3 minutes (3.3 Column Volumes)

Injection vol.: 2µL

Flow rate: 1.0 mL / minute

Detection: UV @ 214 nm (0-4.5 minutes) , then 285 nm (4.5-10 minutes)

Sample Preparation:

- The stock solution was prepared by dissolving 1.0 mg of standards in 10.00 mL of the Mobile Phase (50:50 Solvent A / Solvent B) . The solution was then filtered with a 0.45 µm Nylon Syringe Filter (MICROSOLV Tech Corp.). The injection sample was diluted 1:10.
- A Primatene® Tablet containing 12.5 mg Ephedrine HCL and 200 mg Guaifenesin was ground and added to a 25 mL volumetric flask. A portion of 50:50 Solvent A / Solvent B diluent was added and the flask was sonicated 10 minutes. It was then diluted to mark and mixed. A portion was filtered with a 0.45 µm Nylon Syringe Filter (MICROSOLV Tech Corp.) and diluted 1:10.

t_o : 0.9 minutes



Attachment No 252 Primatene Tablet Analyzed with HPLC pdf 0.3 Mb [Download File](#)

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