

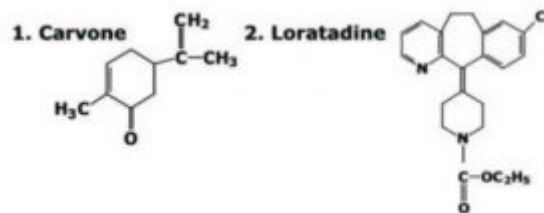
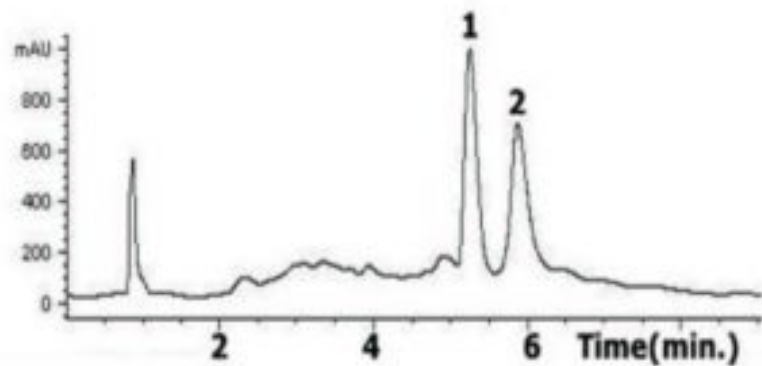


Carvone and Loratadine Analyzed with HPLC - AppNote

Linear Gradient In Normal Phase Mode on a C18 Column for Selectivity

Carvone and Loratadine have similar Polarity but in this Method, they can be separated while maintaining significant Retention ($k > 2$). When the Mobile Phase of 95% Hexane and 5% Dichloromethane is used, the Loratadine is infinitely retained. This Normal Phase Analysis shown below may be used as routine Quality Control in the production or purity determination of both Carvone and /or Loratadine.

The proposed Method can also be used as a general analysis of pharmaceutical compositions for oral administration containing an antihistaminic compound and a Terpenoid compound, which are useful in the prevention or treatment of Allergic Rhinitis (Hay Fever) and mild Asthma.



Peaks:

- 1. Carvone
- 2. Loratadine

Method Conditions



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

Catalog No.: 40018-75P

Dimensions: 4.6 x 75mm

Mobile Phase:

A: Dichloromethane

B: Hexane

Gradient:

Time (minutes)	%B
0-0.5	100
7-10	50
10.5	100

Injection vol.: 10µL

Flow rate: 0.5mL / minute

Detection: UV @ 254nm

Sample Preparation: 0.1mg / mL in 50:50 Hexane / Dichloromethane

Notes: Recently the USA National Cancer Institute and others are evaluating chemo-preventive and anti-carcinogenic properties of Monoterpenes (naturally occurring non-nutrient dietary constituents like Carvone). If administered in the diet, they prevent or cause the regression of colon, hepatic, and pancreatic cancers



chemically induced in laboratory animals. Loratadine: (Lora) is a non-sedative second generation H1-receptor-blocker. It is available commercially as mono-component tablets as Claritin1.



Attachment

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