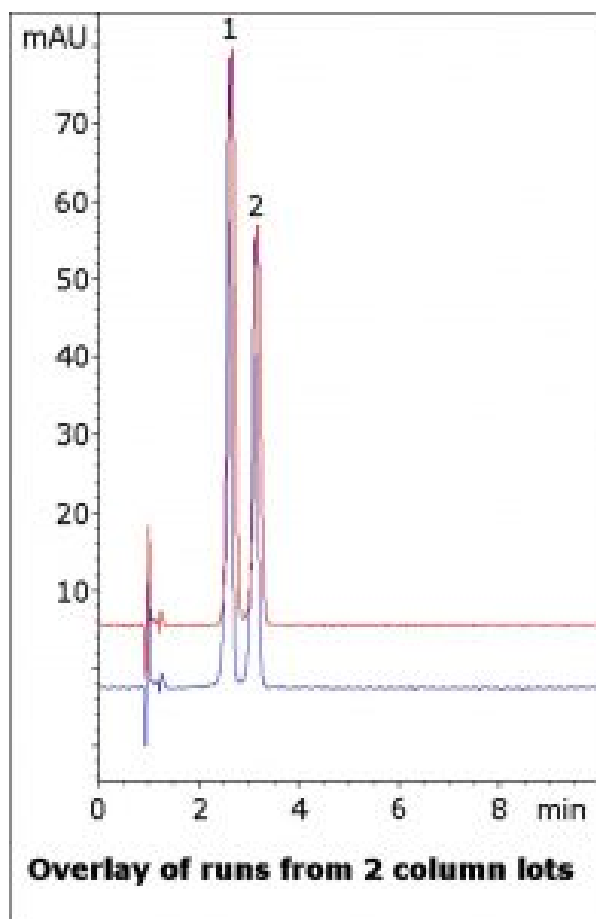


## Terbutaline and Salbutamol analyzed by HPLC – AppNote

### Separation of $\beta$ 2-Adrenergic Receptor Agonists

This Method shows how two structurally similar compounds can be readily separated. This is an important characteristic in many types of HPLC Methods since typical separations often involve impurities, degradants, metabolites, and other groups of compounds that have subtle structural differences. These two compounds for instance were found to coelute using Reversed Phase approaches.

The Method shown here is simple and the Isocratic Mobile Phase is easy to prepare. Baseline resolution is obtained for the two compounds. Furthermore, the Method reproducibility is good, as shown in the *figure* which uses Columns from two different lots.



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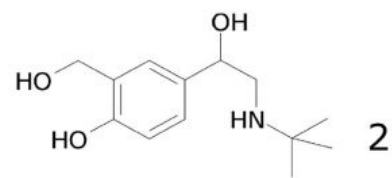
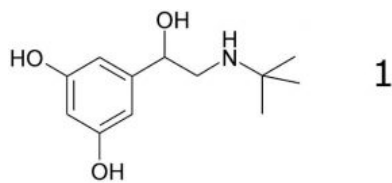
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### Peaks:

1. Terbutaline
2. Salbutamol

## Method Conditions

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

**Catalog No.:** 70000-7.5P

**Dimensions:** 4.6 x 75mm

**Mobile Phase:** 5% DI Water / 95% Acetonitrile / 0.1% Trifluoroacetic Acid (TFA) v/v

**Injection vol.:** 2μL

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 220nm

**Sample Preparation:** 0.1mg / mL Terbutaline and Salbutamol reference standards in diluent of 50:50 0.1 DI Water / Acetonitrile / Trifluoroacetic Acid (v/v).

**t<sub>0</sub>:** 0.9 minutes

**Note:** Salbutamol and Terbutaline are β<sub>2</sub>-Adrenergic receptor agonists used for treatment of asthma and pulmonary diseases. Salbutamol is available under the trade name Ventolin®. Trade names for Terbutaline include Brethine®, Bricanyl®, and Brethaire®.



## Attachment

**Terbutaline and Salbutamol Analyzed by HPLC pdf** [Download File](#)

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