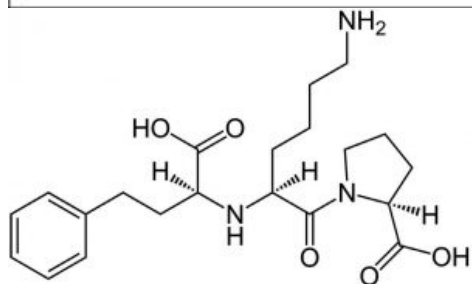
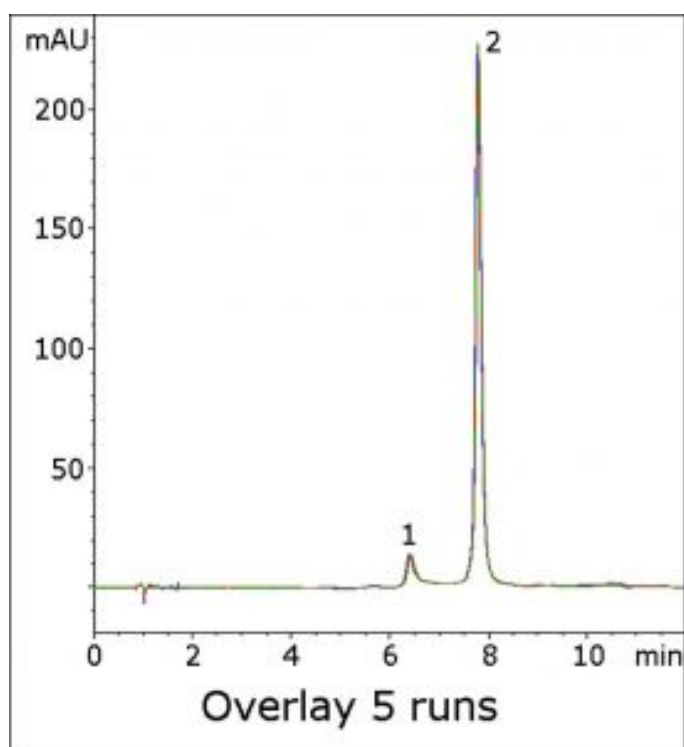


Lisinopril Analysis by HPLC - AppNote

Retention and Peak Shape for Highly Polar Compound

As a highly hydrophilic compound, Lisinopril is not well-suited to Reversed Phase Methods. The USP assay method for Lisinopril uses a highly Aqueous Mobile Phase (96% 2.76 g / L Monobasic Sodium Phosphate adjusted to pH 5.0 / 4% Acetonitrile) in Reversed Phase with an L7 Column.

The Peak efficiency was found to be significantly low when using the USP method. In this method, hydrophilic retention is readily achieved (*see Figure*) with a symmetric Peak shape. The analyte retention shows good repeatability, as shown in the five-run overlay.



Peaks:

1. Impurity
2. Lisinopril

Method Conditions

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

Catalog No.: 70000-7.5P

Dimensions: 4.6 x 75mm

Mobile Phase:

A: DI Water / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

Gradient:

Time (minutes)	%B
0	85
2	20
9	20
10	85

Post Time: 2 minutes

Flow rate: 1.0 mL / minute

Detection: UV @ 215nm

Injection vol.: 5µL

Sample Preparation:

Stock Solution: 1mg / mL Lisinopril in 50% Solvent A / 50% Solvent B diluent

Working Solution: Stock solution was diluted to 0.1 mg / mL with 50% Solvent A / 50% Solvent B diluent

t₀: 0.9 minutes

Note: Lisinopril is an Angiotensin-Converting Enzyme (ACE) inhibitor that is used for treatment of cardiovascular conditions such as hypertension, congestive heart failure, and heart attacks.



Attachment

No 167 Lisinopril Analysis by HPLC pdf 0.3 Mb [Download File](#)