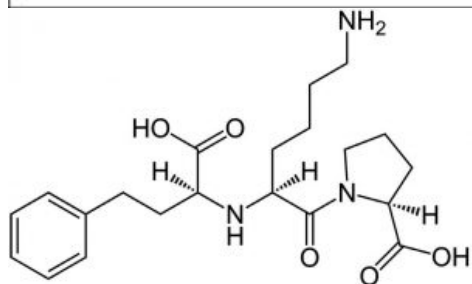
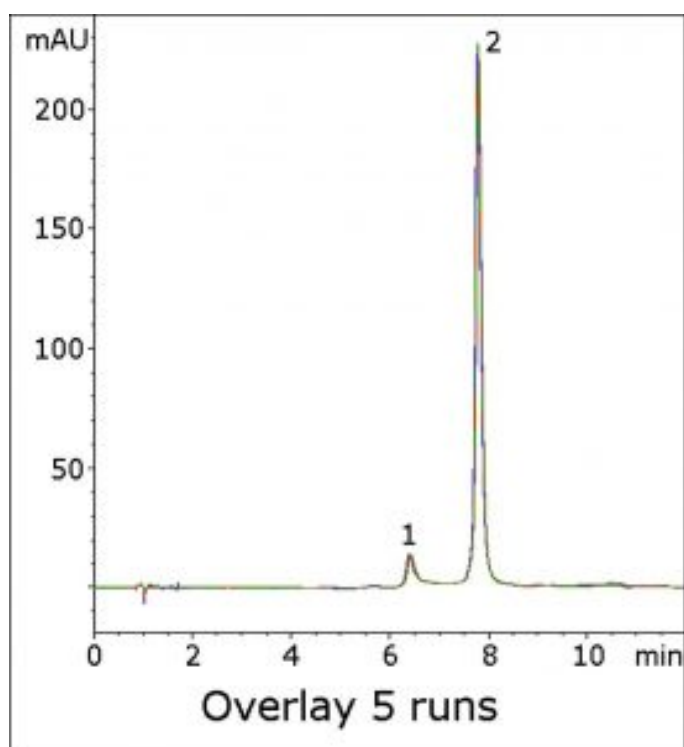


## Lisinopril Analysis by HPLC - AppNote

### 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

**t<sub>0</sub>:** 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](#)