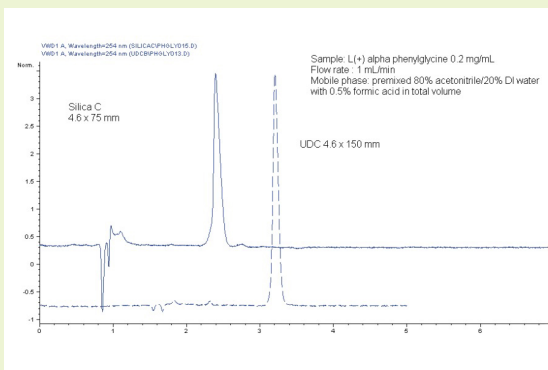
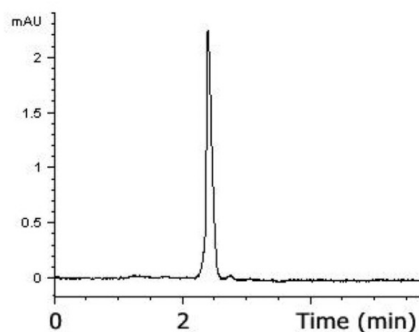
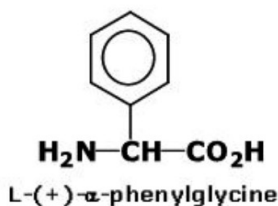


# L(+)- $\alpha$ -Phenylglycine for Antibiotic Analysis

## Retention & Fast Analysis Using Cogent Silica-C column



**Notes:** A chromatogram using a Cogent UDC-Cholesterol column is shown to compare the stronger retention of the Silica-C 75mm column compared with the Cholesterol 150mm column. Both columns used the same mobile phase.

### Method Conditions

**Column:** Cogent Silica-C™, 4 $\mu$ m, 100Å

**Catalog No.:** 40000-75P

**Dimensions:** 4.6 x 75 mm

**Mobile Phase:** A: 80% Acetonitrile/ 19.5% DI H<sub>2</sub>O/ 0.5% formic acid (pre-mixed)

**Injection vol.:** 5 $\mu$ L

**Flow rate:** 1 mL/min

**Detection:** 254 nm UV

**Sample:** L-(+)- $\alpha$ -phenylglycine 0.3 mg/mL dissolved in the mobile phase

**t<sub>0</sub>:** 0.89 min

### Discussion

Cogent Silica-C column produces satisfactory retention of the important amino acid L-(+)- $\alpha$ -phenylglycine under isocratic elution using a simple mobile phase. In addition the retention when using the Cogent Silica-C column is extremely reproducible (%RSD 0.2).

Phenylglycine is a synthetic amino acid used in manufacturing lactam antibiotics, such as semi-synthetic cephalosporines and penicillins. The application above is done using the ANP (aqueous normal phase) mode.