



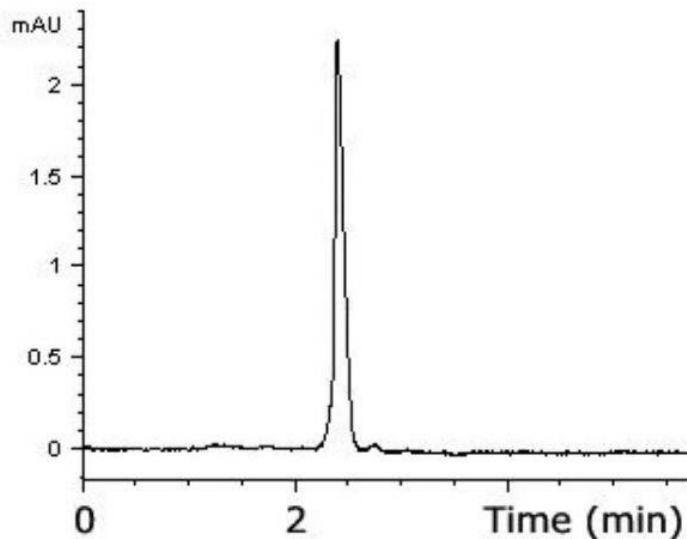
## L-a-phenylglycine Antibiotic Analysis with HPLC - AppNote

### Comparison using Cogent Silica-C™ and UDC-Cholesterol™ HPLC Columns

In this Method, a non-modified, silica-hydride HPLC Column, Cogent Silica-C, produces good Retention of the important amino acid L(+)- $\alpha$ -Phenylglycine with an Isocratic Mobile Phase. In addition the Retention Times are extremely Reproducible (%RSD 0.2).

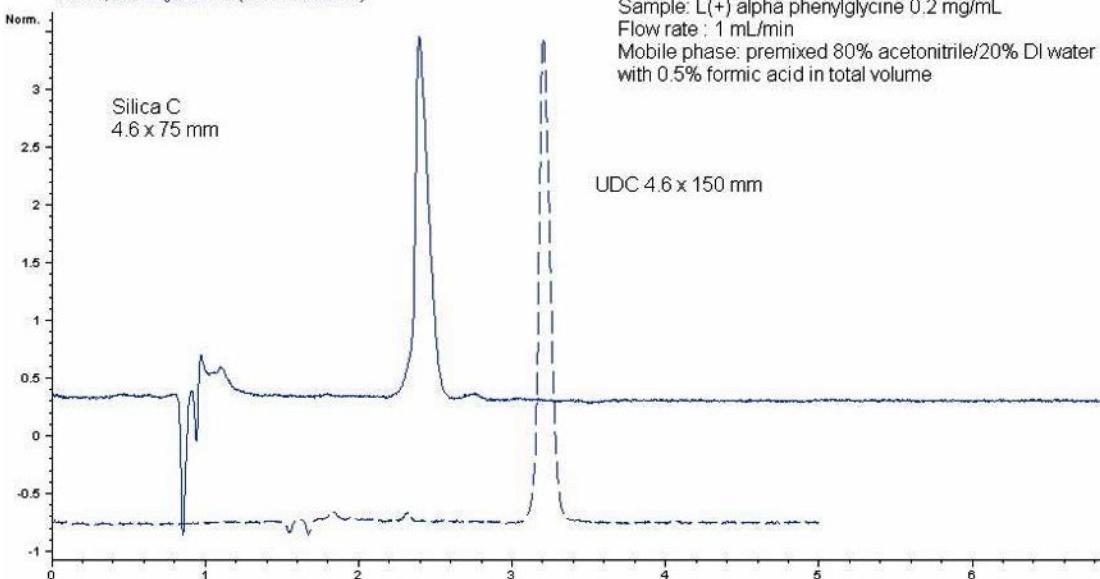
The same Method using a Cogent UDC-Cholesterol Column (*UDC*), silica-hydride with an 11 Carbon Hydrocarbon and a Cholesterol molecule bonded to it, highlights the strong Retention on the Silica-C 4.6 x 75mm Column compared with the longer Cholesterol 4.6 x 150mm Column for this compound.

*Both Chromatograms use the same Mobile Phase in the ANP or Aqueous Normal Phase mode of HPLC.*



VWD1 A, Wavelength=254 nm (SILICAC\PHGLY015.D)  
VWD1 A, Wavelength=254 nm (UDC\PHGLY013.D)

Sample: L(+) alpha phenylglycine 0.2 mg/mL  
Flow rate : 1 mL/min  
Mobile phase: premixed 80% acetonitrile/20% DI water  
with 0.5% formic acid in total volume



**L-(+)- $\alpha$ -phenylglycine**

## Method Conditions

### Columns:

Cogent Silica-C™, 4μm, 100Å

Cogent UDC-Cholesterol, 4μm, 100Å

### Catalog Nos.:

40000-75P

[69069-15P](#)

### Dimensions:

4.6 x 75mm

4.6 x 150mm

**Mobile Phase:** A: 80% Acetonitrile / 19.5% DI Water / 0.5% Formic Acid (*pre-mixed*)

**Injection vol.:** 5μL

**Flow rate:** 1mL / minute

**Detection:** UV @ 254nm

**Sample Preparation:** L(+)-α-Phenylglycine 0.3mg / mL dissolved in the Mobile Phase

**to:** 0.89 minutes

**Note:** Phenylglycine is a synthetic amino acid used in manufacturing Lactam antibiotics, such as semi synthetic Cephalosporins and Penicillins.

## Attachment

**No 46 L-a-phenylglycine Antibiotic Analysis with HPLC pdf 0.3 Mb** [Download File](#)

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