

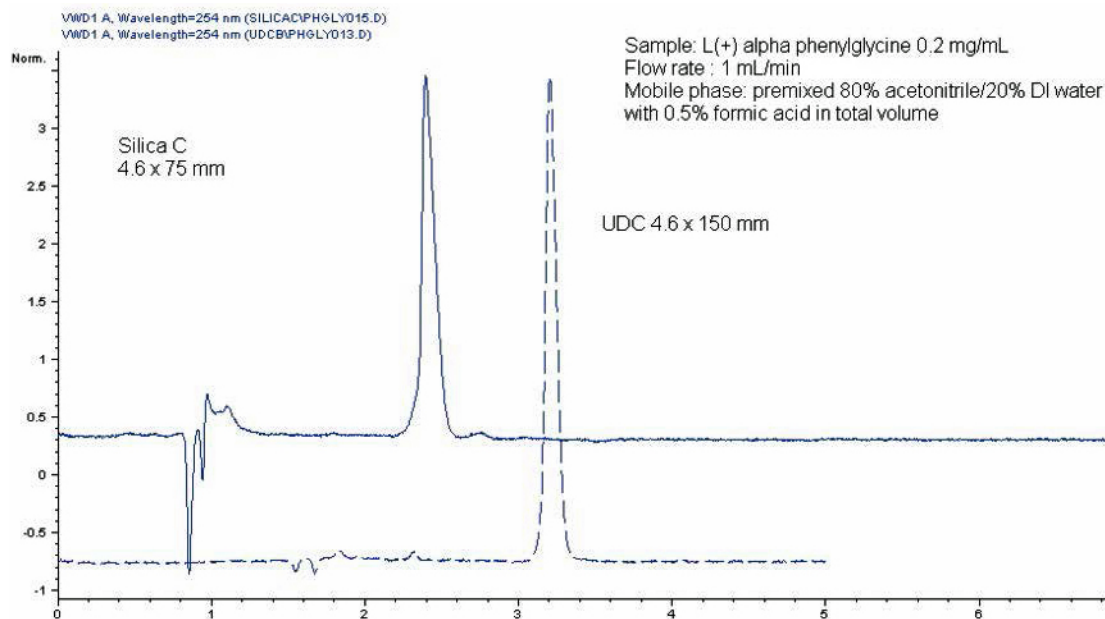
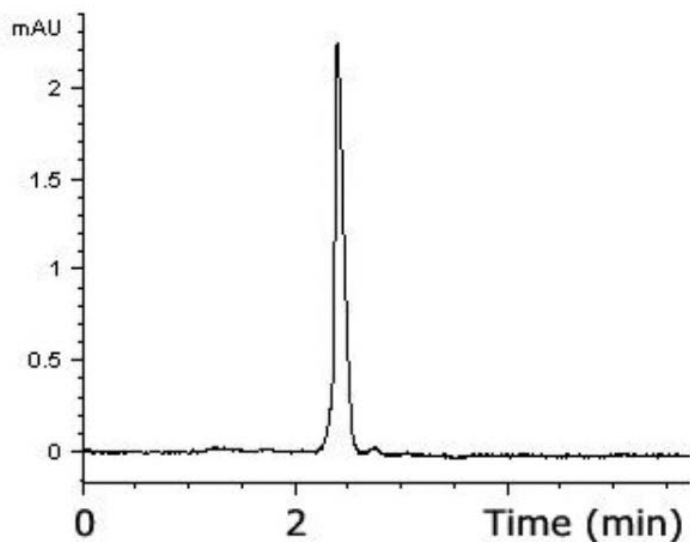
## L-a-phenylglycine Antibiotic Analysis with HPLC – AppNote

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

In this Method, a non-modified, silica-hydrate 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-hydrate 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.



The Chrom Resource Center  
© 2024, All Rights Apply

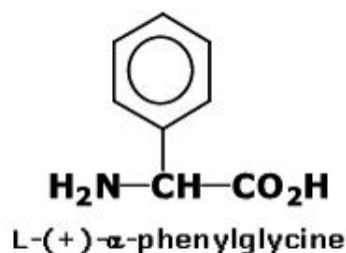
**Technology Corporation**

3141 Blvd. NE, Leland, NC 28451

tel. (910) 769-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)



## Method Conditions

### Columns:

Cogent Silica-C™, 4 $\mu$ m, 100Å

Cogent UDC-Cholesterol, 4 $\mu$ m, 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.:** 5 $\mu$ L

**Flow rate:** 1mL / minute

**Detection:** UV @ 254nm

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

**t<sub>0</sub>:** 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- $\alpha$ -phenylglycine Antibiotic Analysis with HPLC pdf 0.3 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)