

Luna Phenyl-Hexyl

Engineered for Stability

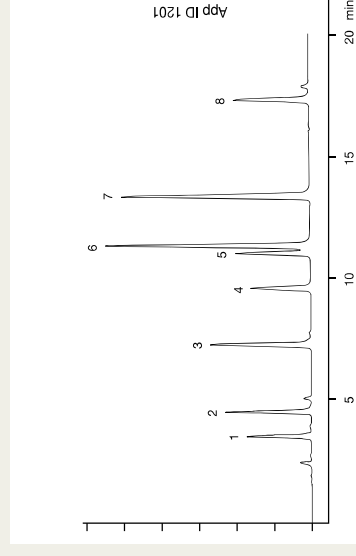
Luna® Phenyl-Hexyl is a reproducible, extremely stable phenyl phase. Most other phenyl phases use a short propyl (3 carbon) linker, which limits the phase stability. This Luna phase uses a hexyl (6 carbon) linker to attach the phenyl group to the silica surface.

The result:

- Highly reproducible phenyl phase
- Dual selectivity of both phenyl phase and a short alkyl phase (such as a C8)
- Excellent retention of amine and polar aromatic compounds
- 1.5 to 10 pH stability for 10,000 hours

ANTIBACTERIALS: COMPARISON OF PHENYL COLUMNS

Phenomenex Luna® 5 µm Phenyl-Hexyl



Conditions same for all columns

Dimension: 150 x 4.6 mm

Mobile Phase: A: 20 mM KH_2PO_4 , pH 2.5
B: Acetonitrile

Gradient: A/B (80:20) to A/B (75:25) in 5 min, then to A/B (55:45) in 15 min

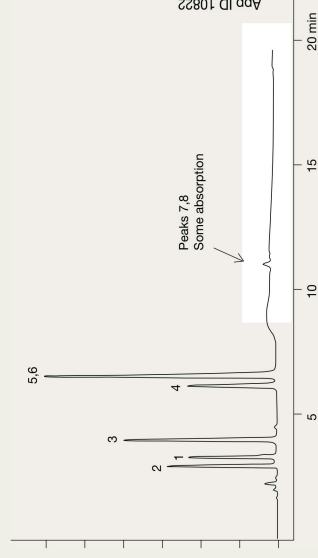
Flow Rate: 1.0 mL/min

Detection: UV @ 254 nm

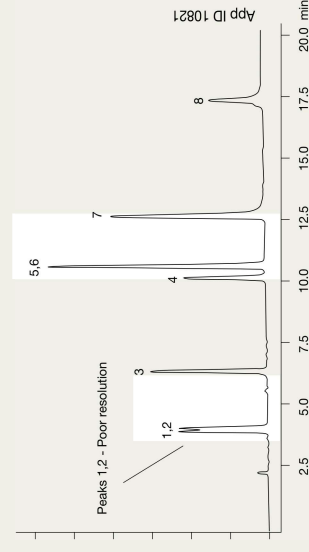
Temperature: 22 °C

Sample: 1. Carbadox
2. Thiampentol
3. Furazolidone
4. Oxolinic acid
5. Sulfadimethoxine
6. Sulfacinoxaline
7. Nalidixic acid
8. Pivmidic acid

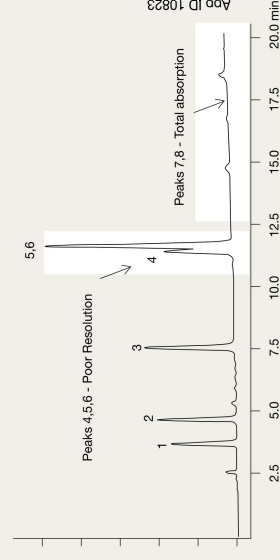
Waters® Spherisorb® 5 µm Phenyl



Agilent Technologies® ZORBAX® 5 µm SB-Phenyl



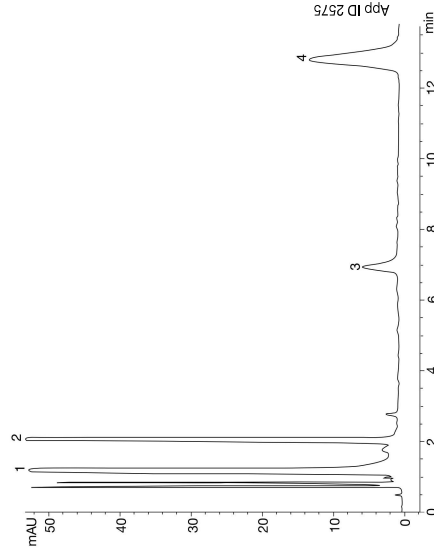
Agilent Technologies® ZORBAX® 5 µm Phenyl



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Applications

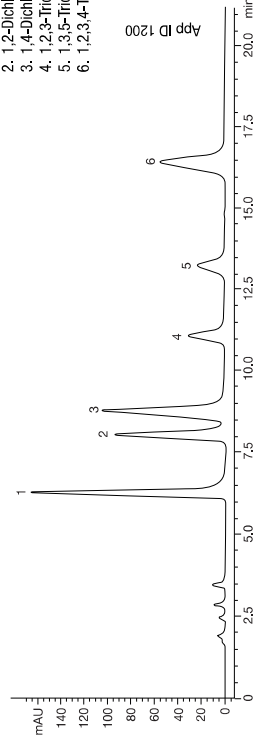
COUGH AND COLD- USP METHOD



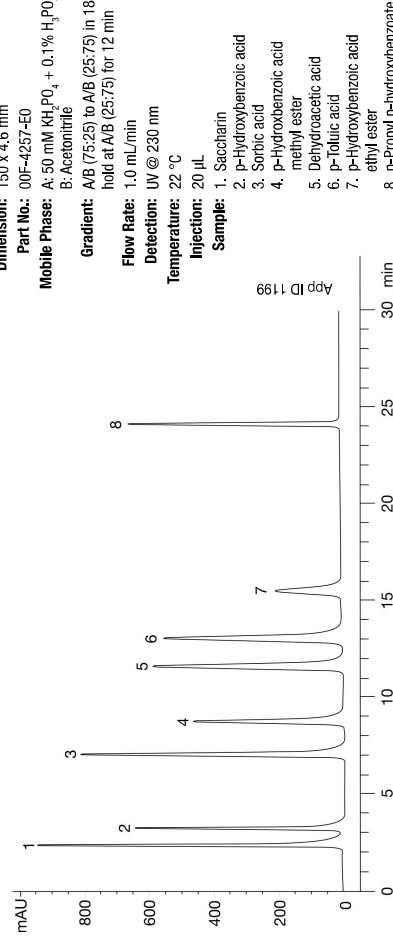
Column: Luna® 5 µm Phenyl-Hexyl
Dimension: 150 x 4,6 mm
Part No.: 00F-4257-E0
Mobile Phase: Methanol/Water with 0.1 % H_3PO_4 and 0.1 % Heptane Sulfonate/
 Acetonitrile with 0.1 % H_3PO_4 (35:55:10)
Flow Rate: 2.05 mL/min
Detection: UV @ 214 nm
Temperature: 22 °C
Sample: 1. Acetaminophen
 2. Pseudoephedrine
 3. Chlorpheniramine
 4. Dextromethorphan

CHLOROBENZENES

Column: Luna 5 µm Phenyl-Hexyl
Dimension: 150 x 4,6 mm
Part No.: 00F-4257-E0
Mobile Phase: A: Water
 B: Acetonitrile
Gradient: A/B (60:40) to A/B (45:55) in 10 min
Flow Rate: 1.0 mL/min
Detection: UV @ 254 nm
Temperature: 22 °C
Sample: 1. Chlorobenzene
 2. 1,2-Dichlorobenzene
 3. 1,4-Dichlorobenzene
 4. 1,2,3-Trichlorobenzene
 5. 1,3,5-Trichlorobenzene
 6. 1,2,3,4-Tetrachlorobenzene



FOOD ADDITIVES



Column: Luna 5 µm Phenyl-Hexyl
Dimension: 150 x 4,6 mm
Part No.: 00F-4257-E0
Mobile Phase: A: 50 mM KH_2PO_4 + 0.1% H_3PO_4
 B: Acetonitrile
Gradient: A/B (75:25) to A/B (25:75) in 18 min,
 hold at A/B (25:75) for 12 min
Flow Rate: 1.0 mL/min
Detection: UV @ 230 nm
Temperature: 22 °C
Injection: 20 µL
Sample: 1. Saccharin
 2. p-Hydroxybenzoic acid
 3. Sorbic acid
 4. p-Hydroxybenzoic acid methyl ester
 5. Dehydroacetic acid
 6. p-Toluic acid
 7. p-Hydroxybenzoic acid ethyl ester
 8. n-Propyl p-hydroxybenzoate

COUGH AND COLD MEDICINE

Column: Luna 3 µm Phenyl-Hexyl
Dimension: 75 x 4,6 mm
Part No.: 00C-4256-E0
Mobile Phase: A: Acetonitrile
 B: 20 mM KH_2PO_4 /
 Methanol (80:20) pH 9.0
Gradient: A/B (0:100) to A/B (80:20) in 5 min
Flow Rate: 1.0 mL/min
Detection: UV @ 214 nm
Temperature: 22 °C
Injection: 20 µL
Sample: 1. p-Aminophenol
 2. Benzoic acid
 3. Acetaminophen
 4. Pseudoephedrine
 5. Butyl paraben
 6. Chlorpheniramine
 7. Diphenhydramine
 8. Dextromethorphan

