

Analyze Challenging Polar Compounds with Confidence

Agilent InfinityLab Poroshell 120 HILIC columns



Hydrophilic interaction chromatography (HILIC) allows you to retain and separate polar analytes using a standard LC system and common reversed-phase solvents.

New Agilent InfinityLab Poroshell 120 HILIC chemistries combine innovative particle technology and bonded phases to improve retention and peak shape for polar analytes. So you can quickly and efficiently separate challenging, highly charged polar compounds—and achieve superior analytical sensitivity in MS mode using MS-friendly eluents.

InfinityLab Poroshell 120 HILIC-Z columns

- Novel zwitterionic stationary phase bonded to 2.7 μm Poroshell 120 particles
- PEEK-lined column option for excellent peak shape and recovery of particularly challenging charged compounds
- High pH and temperature stability: Up to pH 12 and 80 $^{\circ}\text{C}$

InfinityLab Poroshell 120 HILIC-OH5 columns

- Novel poly-hydroxy fructan phase bonded to 2.7 μm Poroshell 120 particles
- Offer alternate selectivity to HILIC and HILIC-Z phases

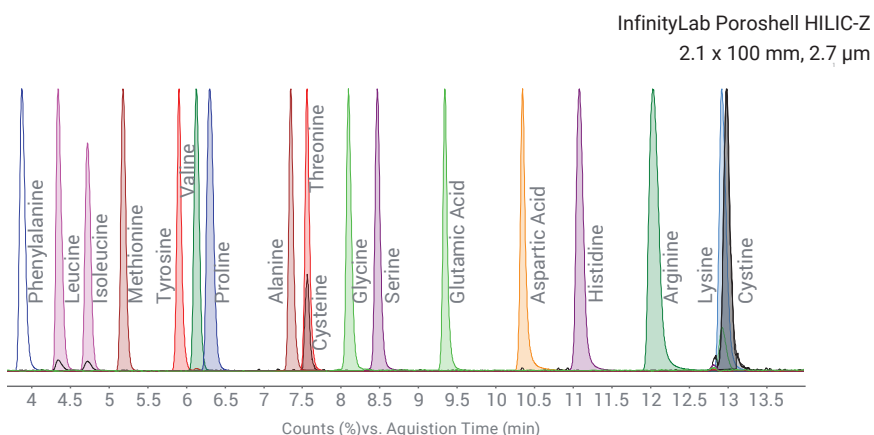


Complete your HILIC workflow

The InfinityLab Deactivator Additive and InfinityLab Poroshell 120 HILIC Columns provide a complete HILIC solution. This simple workflow reduces analyte interaction with metal in the system—increasing instrument sensitivity and saving time.

www.agilent.com/chem/infinityLab-additive

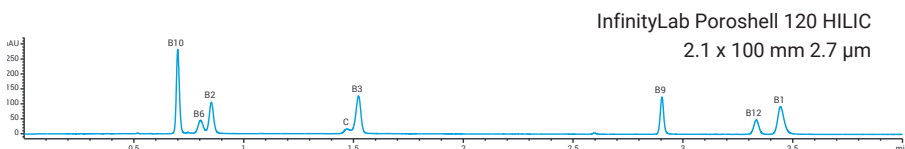
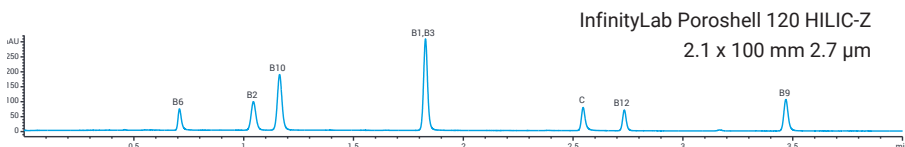
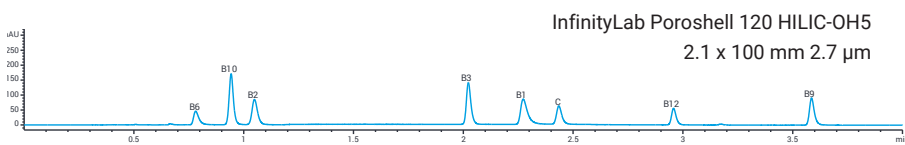
Excellent retention, peak shape, and analytical sensitivity: Separation of underivatized amino acids by LC/MS



Conditions:

- Mobile phase A: 20 mM ammonium formate in H₂O, pH3
- Mobile phase B: 90:10 ACN/H₂O with 20 mM ammonium formate, pH3
- Gradient: 100% B to 70% B over 10 min, return to 100% B
- Flow rate: 0.8 ml/min
- Temp: 30 $^{\circ}\text{C}$
- MS detection: Agilent MS-QQQ, MS2 SIM mode

Retention and separation of water soluble vitamins



This example demonstrates **alternate selectivity** across Poroshell HILIC phases using the same method conditions. Separations can be further optimized on each column by altering method conditions.

Conditions:

A: 100 mM Ammonium Acetate + 0.5% Acetic Acid (pH ~4.6) in H₂O,

B: CH₃CN 0.5 mL/min, 87% B for 1 min, 87-50% B in 4 min, 3 min re-equilibration

1 µL injection, 40 °C, UV detection at 260 nm, 80 Hz

Water soluble vitamins (B&C)

thiamine (B1)
riboflavin (B2)
niacin/nicotinic acid (B3)
pyridoxine/pyridoxol (B6)
folate/folic acid (B9)
4-aminobenzoic acid/PABA (B10)
cyanocobalamin (B12)
ascorbic acid (C)

Ordering Information

Column description	Part number
InfinityLab Poroshell 120 HILIC-OH5, 2.1 x 50 mm, 2.7 µm	689775-601
InfinityLab Poroshell 120 HILIC-OH5, 2.1 x 100 mm, 2.7 µm	685775-601
InfinityLab Poroshell 120 HILIC-OH5, 2.1 x 150 mm, 2.7 µm	683775-601
InfinityLab Poroshell 120 HILIC-OH5, 4.6 x 50 mm, 2.7 µm	689975-601
InfinityLab Poroshell 120 HILIC-OH5, 4.6 x 100 mm, 2.7 µm	685975-601
InfinityLab Poroshell 120 HILIC-OH5, 4.6 x 150 mm, 2.7 µm	683975-601
UHPLC Guard, HILIC-Z, 2.1 mm x 5 mm, 2.7 µm, 3 pk	821725-947
UHPLC Guard, HILIC-Z, 3.0 mm x 5 mm, 2.7 µm, 3 pk	823750-948
UHPLC Guard, HILIC-Z, 4.6 mm x 5 mm, 2.7 µm, 3 pk	820750-933
InfinityLab Poroshell 120 HILIC-Z, 2.1 x 50 mm, 2.7 µm	689775-924
InfinityLab Poroshell 120 HILIC-Z, 2.1 x 100 mm, 2.7 µm	685775-924
InfinityLab Poroshell 120 HILIC-Z, 2.1 x 150 mm, 2.7 µm	683775-924
InfinityLab Poroshell 120 HILIC-Z, 2.1 x 50 mm, 2.7 µm (PEEK lined)	679775-924

Column description	Part number
InfinityLab Poroshell 120 HILIC-Z, 2.1 x 100 mm, 2.7 µm (PEEK lined)	675775-924
InfinityLab Poroshell 120 HILIC-Z, 2.1 x 150 mm, 2.7 µm (PEEK lined)	673775-924
InfinityLab Poroshell 120 HILIC-Z, 3.0 x 50 mm, 2.7 µm	689975-324
InfinityLab Poroshell 120 HILIC-Z, 3.0 x 100 mm, 2.7 µm	685975-324
InfinityLab Poroshell 120 HILIC-Z, 3.0 x 150 mm, 2.7 µm	683975-324
InfinityLab Poroshell 120 HILIC-Z, 4.6 x 50 mm, 2.7 µm	689975-924
InfinityLab Poroshell 120 HILIC-Z, 4.6 x 100 mm, 2.7 µm	685975-924
InfinityLab Poroshell 120 HILIC-Z, 4.6 x 150 mm, 2.7 µm	683975-924

Additive description	Part number
InfinityLab Deactivator Additive, 50 mL	5191-4506
InfinityLab Deactivator Additive, 25 mL	5191-3940



Agilent InfinityLab is an optimized portfolio of LC instruments, columns, and supplies designed to work together in perfect harmony. Combined with Agilent OpenLAB software and Agilent CrossLab Services, Agilent InfinityLab provides you with end-to-end support to make every day more productive. Learn more at www.agilent.com/chem/infinitylab

Learn more about separating polar compounds using reversed-phase mobile phases

www.agilent.com/chem/poroshell-120

For Research Use Only. Not for use in diagnostic procedures.

This information is subject to change without notice.

© Agilent Technologies, Inc. 2017, 2018
Published in the USA, July 1, 2018
5991-8547EN

