

# Prevail™ HPLC Columns

## *A New HPLC Column Family Conquers 21<sup>st</sup> Century Separation Challenges*

### Prevail™ Columns Give You:

- *A General-Purpose Reversed-Phase Column for a Wide Range of Applications*
- *Stability in Highly Aqueous Mobile Phases*
- *Excellent Retention of Non-polar Analytes*
- *A Polar-embedded Phase*
- *Specialty Phases for Specific Applications*
- *Formats for Your LC/MS Applications*

*With Prevail™, You'll Find a Solution for all Your HPLC Column Needs.*



**NEW  
from  
Alltech**

**Alltech**

UNP

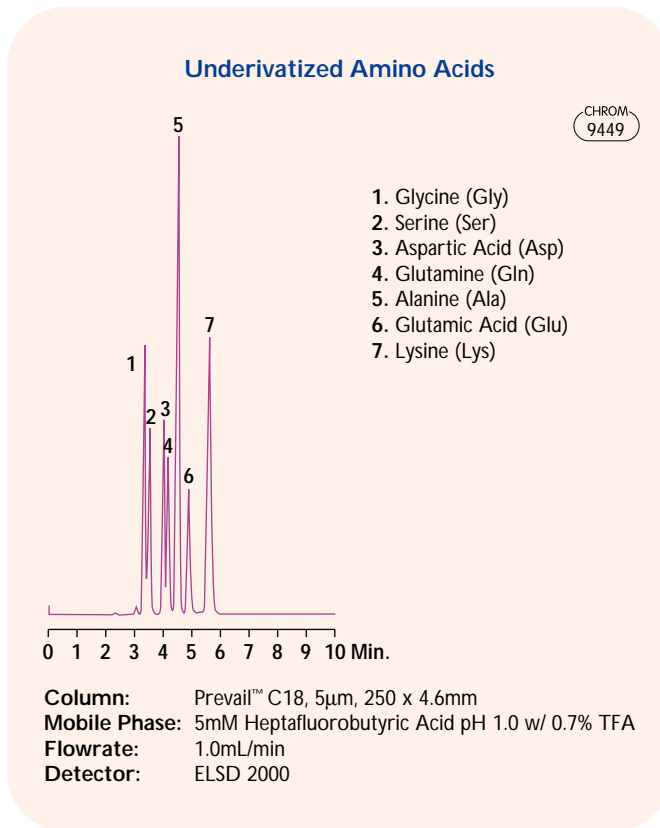
Bulletin #460

# Aqueous Mobile Phases . . .

- *Separate Highly Polar Analytes Without Fear of Phase Collapse.*

- **Excellent Retention and Reproducibility of Highly-Polar Analytes**
- **No Phase Collapse**

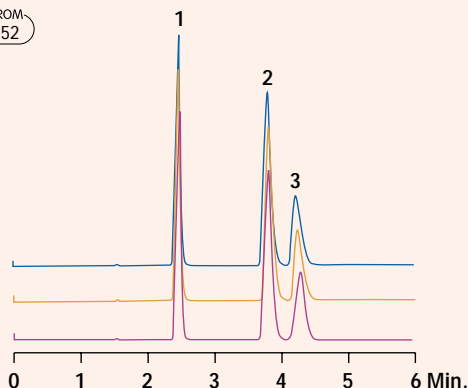
Prevail™ HPLC columns offer exceptional versatility for difficult separations, including highly-polar analytes on C18. Traditional reversed-phase packings experience bonded phase collapse under highly aqueous (95+%) conditions. Prevail™ bonded phases remain fully extended, even under 100% aqueous conditions, for effective retention of highly polar analytes without the detrimental effects of phase collapse.



## Prevail™'s Bonded Phases are Stable in 100% Aqueous Conditions

CHROM-9450  
CHROM-9451  
CHROM-9452

**Prevail™ C18, 5µm, 150 x 4.6mm**



### Catecholamines

1. Norepinephrine
2. Epinephrine
3. 5-Hydroxydopamine

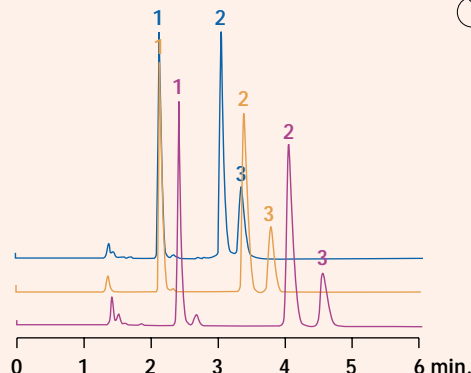
After 24 hrs.  
After 8 hrs.  
After 20 min.

**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub>, pH 2.7  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 270nm

Prevail™ C18 remains stable and provides reproducible separations under highly aqueous conditions that cause traditional C18 phases to collapse.

CHROM-9453  
CHROM-9454  
CHROM-9455

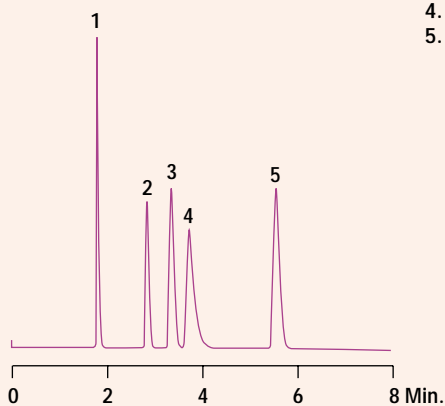
**Competitor A C18, 5µm, 150 x 4.6mm**



### Nucleic Acid Bases

CHROM  
9411

1. Cytosine
2. Uracil
3. Guanine
4. Adenine
5. Thymine

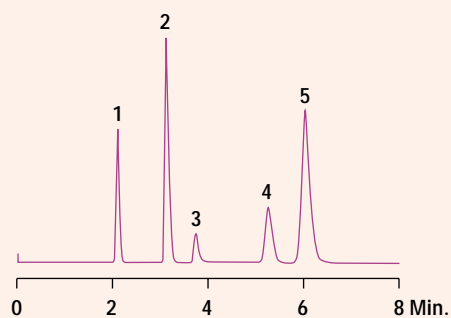


**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub> pH 3.0:CH<sub>3</sub>CN (98:2)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Nucleosides

CHROM  
9410

1. Cytidine
2. Uridine
3. Xanthine
4. Guanosine
5. Adenosine

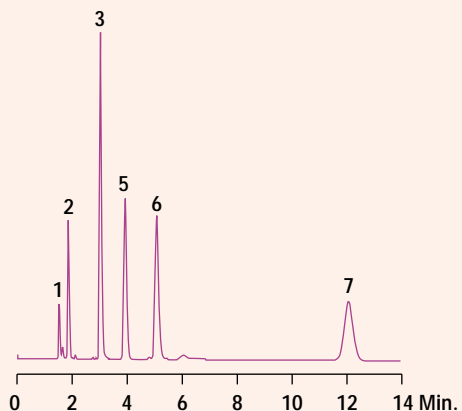


**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub> pH 3.0:CH<sub>3</sub>CN (96:4)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Water Soluble Vitamin Standards

CHROM  
9388

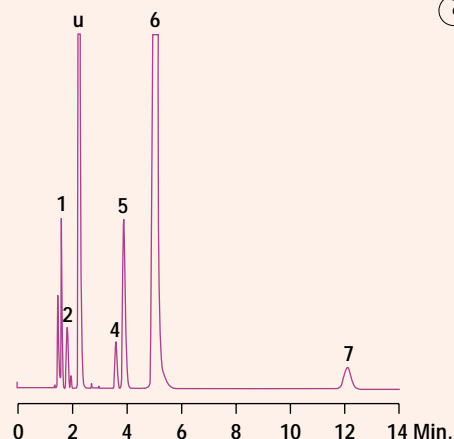
1. Thiamine
2. Ascorbic Acid
3. Nicotinic Acid
4. Fumaric Acid
5. Pyridoxine
6. Niacinamide
7. Pantothenic Acid
- u. Unknown



**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub>, pH 3.0:CH<sub>3</sub>CN (97:3)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 212nm

### Water Soluble Vitamins From Multi-Vitamin Tablet

CHROM  
9456



# Organic Mobile Phases . . .

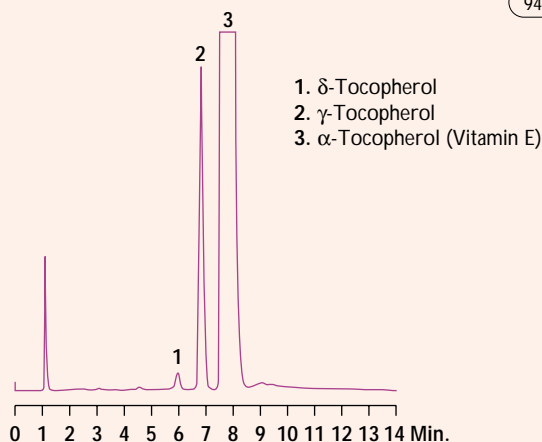
- *Separate Hydrophobic Analytes with Excellent Retention and Peak Shape.*

- **Strongly Retain Hydrophobic Analytes**
- **Eliminate Concerns about Solubility of Non-Polar Compounds**
- **Increase Sensitivity in LC/MS and ELSD Applications**

Many reversed-phase packings that tolerate highly aqueous conditions lack the hydrophobicity needed to retain compounds under 100% organic mobile phase conditions. Prevail™'s high carbon load retains hydrophobic analytes even under 100% organic mobile phase conditions. Using 100% organic mobile phases increases the solubility of highly hydrophobic compounds, eliminating analyte precipitation. Removing the aqueous mobile phase component increases sensitivity in LC/MS and ELSD applications where the mobile phase volatility is critical.

## Vitamin E Soft Gel Tablet

CHROM-9458



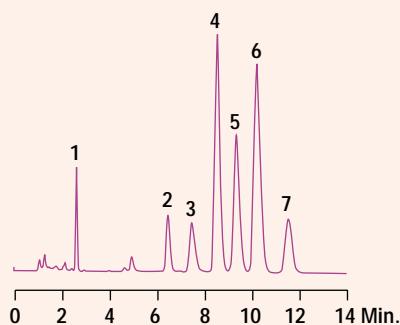
1. δ-Tocopherol
2. γ-Tocopherol
3. α-Tocopherol (Vitamin E)

**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** CH<sub>3</sub>CN:MeOH (75:25)  
**Flowrate:** 1.5mL/min  
**Detector:** ELSD 2000

## Fat Soluble Vitamins and Tocopherols

CHROM-9390

### Prevail™ C18, 5µm, 150 x 4.6mm

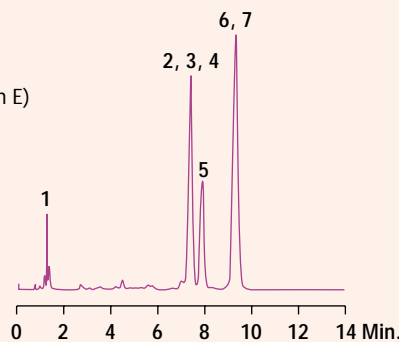


1. Vitamin A
2. δ-Tocopherol
3. γ-Tocopherol
4. α-Tocopherol (Vitamin E)
5. Vitamin D2
6. Vitamin D3
7. Vitamin K

**Mobile Phase:** CH<sub>3</sub>CN:MeOH (75:25)  
**Flowrate:** 1.5mL/min  
**Detector:** UV at 220nm

CHROM-9457

### Competitor B C18, 5µm, 150 x 4.6mm



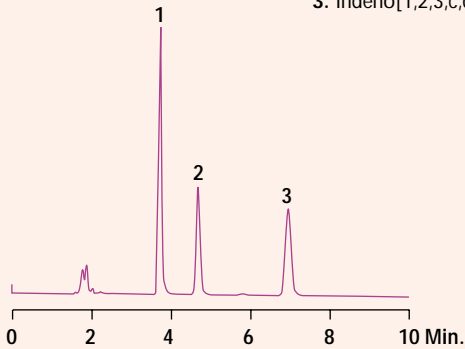
**Mobile Phase:** CH<sub>3</sub>CN:MeOH (75:25)  
**Flowrate:** 1.5mL/min  
**Detector:** UV at 220nm

Prevail™ C18's hydrophobicity separates nonpolar compounds under high organic mobile phase conditions where other C18 columns fail.

### Polyaromatic Hydrocarbons

CHROM-9391

1. Chrysene
2. Benzo[k]fluoranthene
3. Indeno[1,2,3,c,d]pyrene

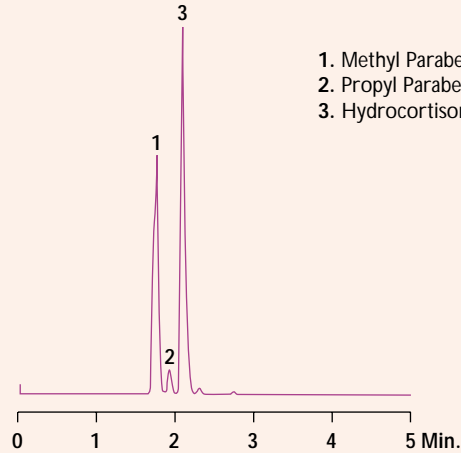


**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** CH<sub>3</sub>CN:MeOH (75:25)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Hydrocortisone Acetate Cream

CHROM-9463

1. Methyl Paraben
2. Propyl Paraben
3. Hydrocortisone Acetate

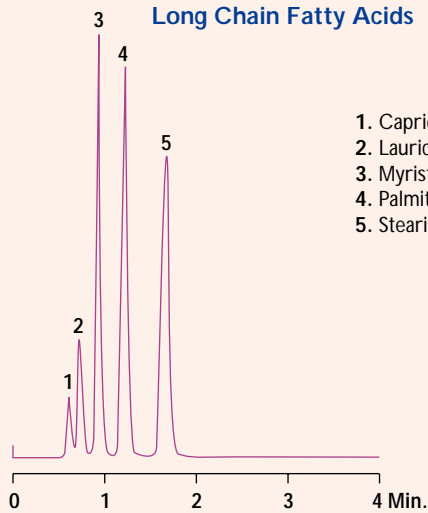


**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** CH<sub>3</sub>CN:H<sub>2</sub>O (90:10)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Long Chain Fatty Acids

CHROM-9459

1. Capric Acid (C10)
2. Lauric Acid (C12)
3. Myristic Acid (C14)
4. Palmitic Acid (C16)
5. Stearic Acid (C18)

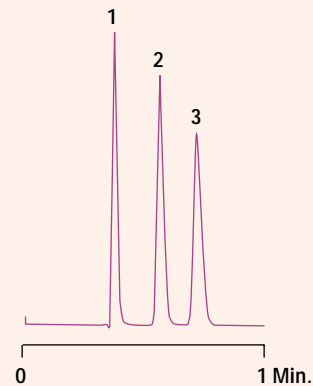


**Column:** Prevail™ C18, 3µm, 53 x 7mm, Rocket™  
**Mobile Phase:** CH<sub>3</sub>CN:MeOH (75:25)  
**Flowrate:** 3.5mL/min  
**Detector:** ELSD 2000

### Steroids

CHROM-9392

1. Hydrocortisone
2. Testosterone
3. Progesterone



**Column:** Prevail™ C18, 3µm, 53 x 7mm, Rocket™  
**Mobile Phase:** MeOH:H<sub>2</sub>O (90:10)  
**Flowrate:** 4.5mL/min  
**Detector:** UV at 254nm

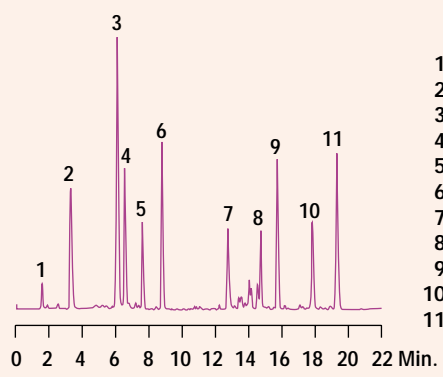
Use Prevail™ Rocket™ columns for fast analyses without degrading the separation.

# ... and Everything in Between

- Makes *Prevail™* the Best Choice for Your HPLC Column Needs.

## Anti-bacterials

CHROM-9396

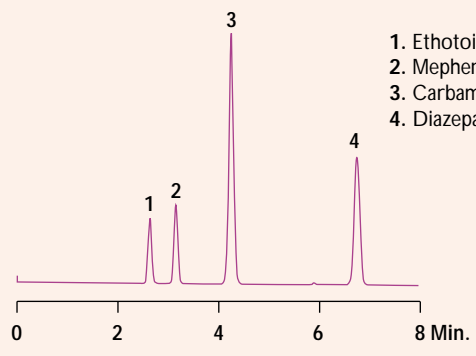


1. Neomycin
2. Amoxicillin
3. Vancomycin
4. Cefatrizine
5. Metampacillin
6. Cefotaxime
7. Unknown
8. Bacitracin
9. Piperacillin
10. Bacampacillin
11. Oxacillin

**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** A: 25mM KH<sub>2</sub>PO<sub>4</sub> pH 3.0  
 B: CH<sub>3</sub>CN  
**Gradient:** Time: 0 | 15 | 22 |  
 %B: 10 | 40 | 40 |  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 210nm

## Anti-convulsants

CHROM-9394

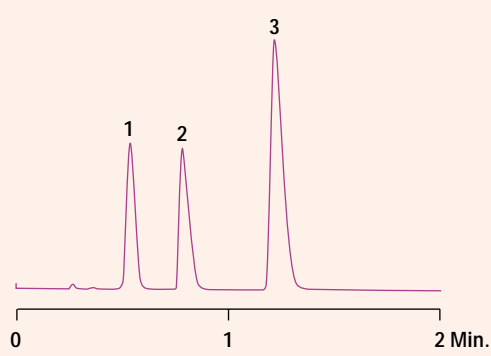


1. Ethotoin
2. Mephenytoin
3. Carbamazepine
4. Diazepam

**Column:** Prevail™ Phenyl, 5µm, 150 x 4.6mm  
**Mobile Phase:** A: H<sub>2</sub>O B: CH<sub>3</sub>CN  
**Gradient:** Time: 0 | 15 |  
 %B: 25 | 60 |  
**Flowrate:** 1.5mL/min  
**Detector:** UV at 254nm

## Anti-hypertensives

CHROM-9395

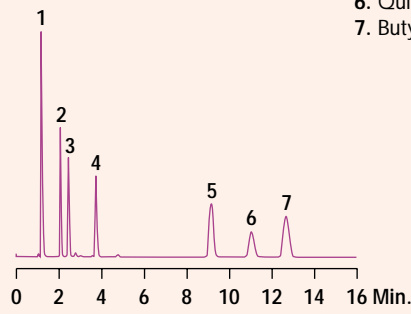


1. Metoprolol
2. Oxprenolol
3. Propranolol

**Column:** Prevail™ C18, 3µm, 53 x 7mm, Rocket™  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub> pH 3.0:CH<sub>3</sub>CN (70:30)  
**Flowrate:** 4.0mL/min  
**Detector:** UV at 220nm

## Acids, Chelates, & Neutrals Mix

CHROM-9406

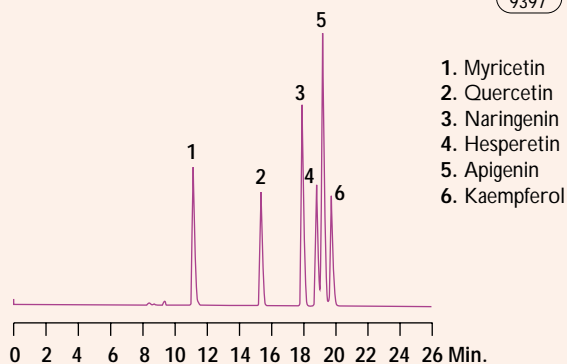


1. Uracil
2. Phenol
3. 4-Phenylbutyric Acid
4. N,N-Diethyl-m-Toluamide
5. Propylbenzene
6. Quinizarin
7. Butylbenzene

**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub> pH 2.5:CH<sub>3</sub>CN (35:65)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Polyphenolic Flavonoids

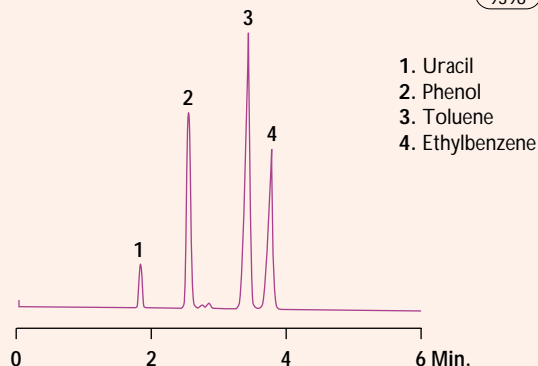
CHROM  
9397



**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** A: 25mM KH<sub>2</sub>PO<sub>4</sub> pH 2.5  
 B: CH<sub>3</sub>CN  
**Gradient:** Time: 0 | 15 | 26 |  
 %B: 20 | 40 | 40 |  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 280nm

### Aromatics

CHROM  
9398

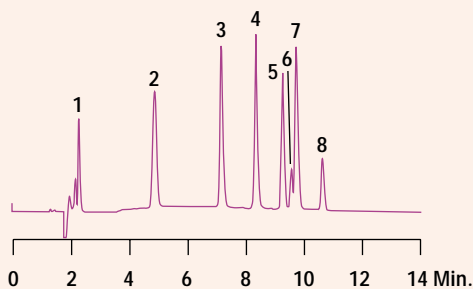


**Column:** Prevail™ Phenyl, 5µm, 150 x 4.6mm  
**Mobile Phase:** H<sub>2</sub>O:CH<sub>3</sub>CN (50:50)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Peptides

CHROM  
9399

- |                          |                       |
|--------------------------|-----------------------|
| 1. GLY-TYR               | 5. Leucine Enkephalin |
| 2. VAL-TYR-VAL           | 6. Oxytocin           |
| 3. Methionine Enkephalin | 7. Angiotensin II     |
| 4. Physalemin            | 8. Substance P        |

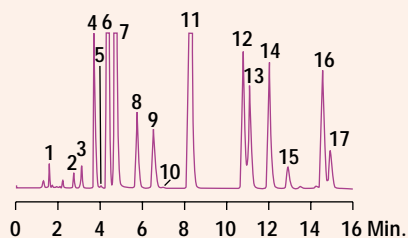


**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** A: 0.15%TFA in H<sub>2</sub>O  
 B: 0.13% TFA in CH<sub>3</sub>CN:H<sub>2</sub>O (95:5)  
**Gradient:** Time: 0 | 15 |  
 %B: 20 | 55 |  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 220nm

### Polyaromatic Hydrocarbons

CHROM  
9400

- |                   |                              |
|-------------------|------------------------------|
| 1. Benzene        | 10. 1,2-Dibenzanthracene     |
| 2. Naphthalene    | 11. Chrysene                 |
| 3. Acenaphthylene | 12. Benzo[b]fluoranthene     |
| 4. Fluorene       | 13. Benzo[k]fluoranthene     |
| 5. Acenaphthene   | 14. Benzo[a]perylene         |
| 6. Phenanthrene   | 15. 1,2,5,6-Dibenzanthracene |
| 7. Anthracene     | 16. 1,2-Dibenzoperylene      |
| 8. Fluoranthene   | 17. Indeno[1,2,3,c,d]pyrene  |
| 9. Pyrene         |                              |



**Column:** Prevail™ C18, 5µm, 150 x 4.6mm  
**Mobile Phase:** A: H<sub>2</sub>O  
 B: CH<sub>3</sub>CN  
**Gradient:** Time: 0 | 4 | 15 |  
 %B: 72 | 72 | 100 |  
**Flowrate:** 1.5mL/min  
**Detector:** UV at 254nm

# Prevail™ Amide

- A Polar Embedded Phase Improves Peak Shape for Polar Analytes in Neutral pH Mobile Phases.

- **Polar Embedded Group Improves Polar Sample Peak Shape**
- **Packing Media Provides Unique Selectivity**
- **Bonded Phase does not Collapse with 100% Aqueous Mobile Phases**

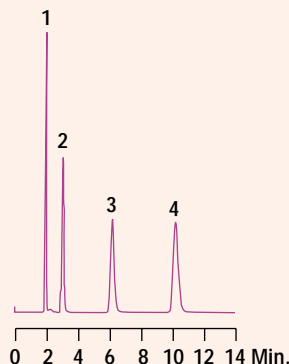
A polar embedded group inserted into the hydrophobic chain of the Prevail™ Amide phase minimizes interaction of polar samples with silanols, providing symmetrical peaks for a wide variety of applications. The amide phase is especially useful at neutral pH where amines can interact strongly with ionized silanols. The presence of the amide group alters the selectivity of the reversed-phase packing, giving separations that are often hard to achieve on conventional reversed-phase columns.

The Polar Embedded Group also helps to wet the hydrophobic chains, and prevents phase collapse in highly aqueous mobile phases.

## Analgesics

CHROM-9385

1. Aspirin
2. Acetaminophen
3. Naproxen
4. Fenpropfen

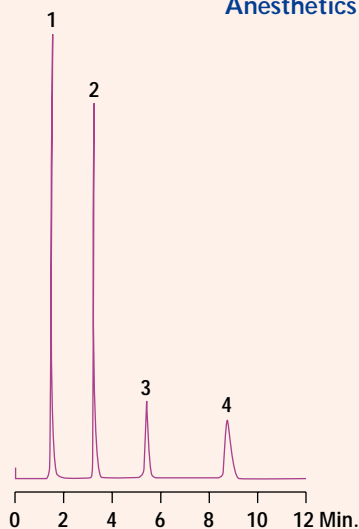


**Column:** Prevail™ Amide, 5µm, 150 x 4.6mm  
**Mobile Phase:** 20mM K<sub>2</sub>HPO<sub>4</sub>, pH7.0:CH<sub>3</sub>CN (75:25)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 210nm

## Anesthetics

CHROM-9436

1. p-aminobenzoic acid
2. Benzocaine
3. Butacaine
4. Tetracaine

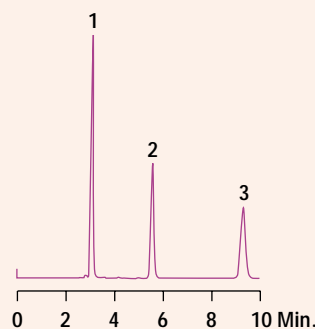


**Column:** Prevail™ Amide, 3µm, 150 x 4.6mm  
**Mobile Phase:** 20mM K<sub>2</sub>HPO<sub>4</sub>, pH 7.0:CH<sub>3</sub>CN (43:57)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 210nm

## Anilines

CHROM-9412

1. Aniline
2. Dimethylaniline
3. Diethylaniline



**Column:** Prevail™ Amide, 5µm, 150 x 4.6mm  
**Mobile Phase:** 20mM K<sub>2</sub>HPO<sub>4</sub>, pH7.0:CH<sub>3</sub>CN (50:50)  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 210nm

# Prevail™ Organic Acid

- A New Standard for Organic Acid Analysis.

- Silica-Based Column for Maximum Efficiency and High Resolution
- Short Run Times and High Sample Throughput at Ambient Temperature
- Acid Stable Media for Long Column Lifetimes
- Lower Cost than Polymeric Organic Acid Columns

The new Prevail™ Organic Acid (OA) columns separate common organic acids with an unsurpassed combination of resolution, speed, sensitivity, and simplicity. A simple acidic phosphate buffer and a Prevail™ OA column at ambient temperature will separate 11 short-chain organic acids in less than 6 minutes.

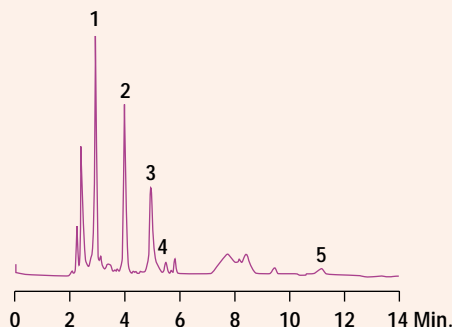
Need more resolution? Try the 250 x 4.6mm Prevail™ OA column. Want faster analyses? Choose the Prevail™ Organic Acid Rocket™ column.

Use pH to adjust column selectivity. Lowering the mobile phase pH progressively suppresses the ionization of the carboxylic acids, making them more hydrophobic. This gives you the ability to move these peaks relative to other peaks in the chromatogram, and it simplifies method development.

## Organic Acids in Rosé Wine

CHROM  
9414

1. Tartaric Acid
2. Malic Acid
3. Lactic Acid
4. Acetic Acid
5. Succinic Acid

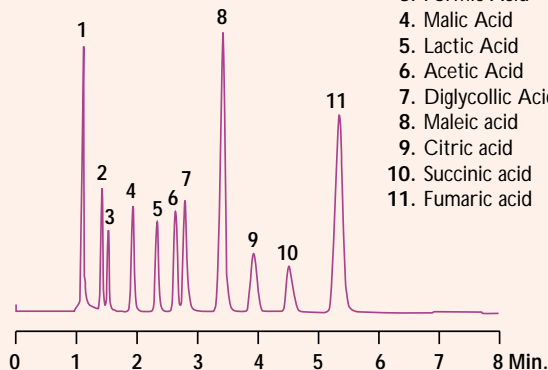


**Column:** Prevail™ Organic Acid, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub>, pH 2.5  
**Flowrate:** 0.7mL/min  
**Detector:** UV at 210nm

## Organic Acid Standards

CHROM  
9384

1. Oxalic Acid
2. Tartaric Acid
3. Formic Acid
4. Malic Acid
5. Lactic Acid
6. Acetic Acid
7. Diglycollic Acid
8. Maleic acid
9. Citric acid
10. Succinic acid
11. Fumaric acid

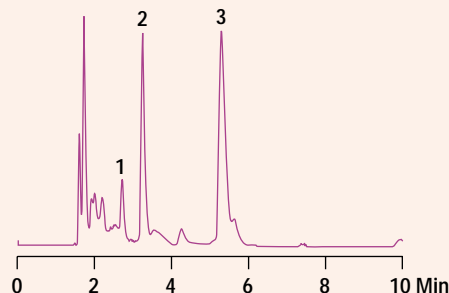


**Column:** Prevail™ Organic Acid, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub>, pH 2.5  
**Flowrate:** 1.5mL/min  
**Detector:** UV at 210nm

## Organic Acids in Orange Juice

CHROM  
9478

1. Malic Acid
2. Ascorbic Acid
3. Citric Acid



**Column:** Prevail™ Organic Acid, 5µm, 150 x 4.6mm  
**Mobile Phase:** 25mM KH<sub>2</sub>PO<sub>4</sub>, pH 2.5  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 210nm

Contact your Alltech office or distributor for current or local prices.

Alltech

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# Prevail™ Carbohydrate ES

## – A Superior Solution for Carbohydrate Analysis.

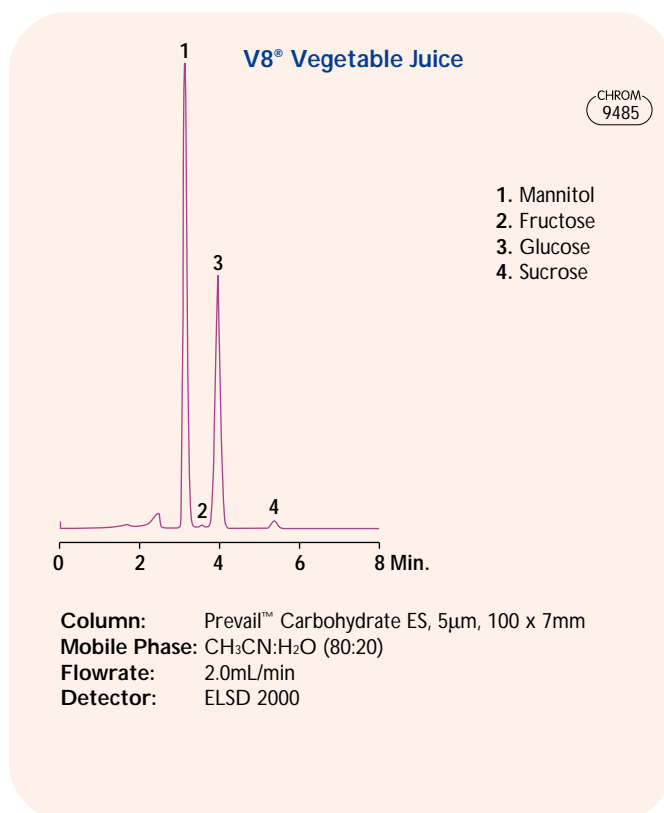
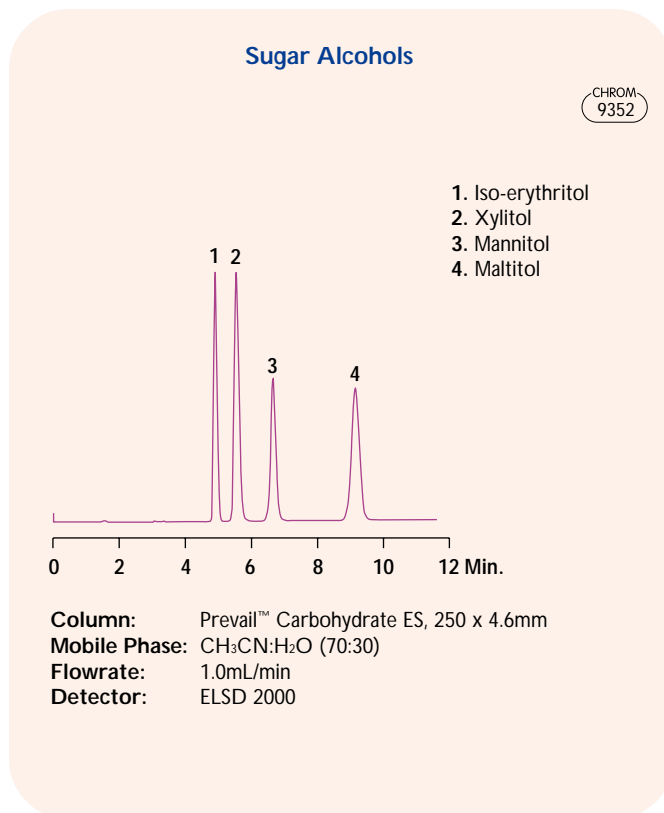
- **Longer Column Lifetime than Traditional Amino Columns**
- **More Versatile Than Ion Exclusion Columns**
- **Optimum Resolution and Peak Shapes at Ambient Temperature**
- **Range of Useful Formats**
- **Combine with Alltech's Model 2000 ELSD for the Carbohydrate Solution: Enhanced Detector Sensitivity, Flat Baselines, Gradient Capability, and Reduced Run Times.**

Prevail™ Carbohydrate ES offers performance superior to traditional amino columns and ion exclusion columns. Because of its rugged bonding technology, Carbohydrate ES delivers quiet, stable baselines and excellent peak shapes long after silica-based amino columns have died. Carbohydrate ES can also separate all carbohydrate classes from mono- to oligosaccharides and complex carbohydrates, making it superior in versatility to application-specific ion exclusion columns.

This column's full potential is realized when used in conjunction with the ELSD 2000 Evaporative Light Scattering Detector. Gradients are powerful and effective when done with the Carbohydrate ES Column/ELSD 2000 Detector\* combination. With gradients, run times are reduced, peak efficiencies are maximized, and detector sensitivity is enhanced.

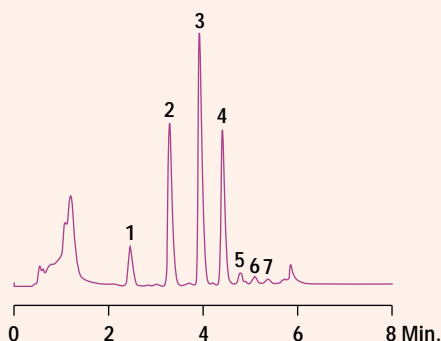
Prevail™ Carbohydrate ES is a 5µm spherical packing offered in four hardware formats: 250 x 4.6mm; 150 x 4.6mm; 100 x 7mm Rocket™; 53 x 7mm Rocket™. For the most complex samples, use the 250 x 4.6mm or 100 x 7mm columns. For simpler mixtures and faster chromatography, consider using the 53 x 7mm Rocket™ format. Both 7mm ID Rocket™ formats offer the advantages of reduced backpressures and faster separations.

\* For more information on the ELSD 2000, fill out the enclosed Business Reply Card to receive Bulletin #437A



### Sweetened Vending Machine Coffee

CHROM  
9477



1. Dextrose
2. Maltose
3. Maltotriose
4. Maltotetraose
5. Maltopentaose
6. Maltohexaose
7. Maltoheptaose

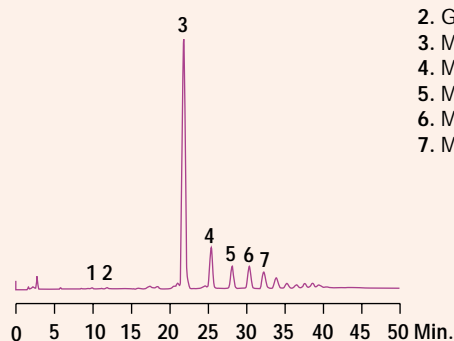
**Column:** Prevail™ Carbohydrate ES, 53 x 7mm, Rocket™  
**Mobile Phase:** A: CH<sub>3</sub>CN  
 B: H<sub>2</sub>O  
**Gradient**

Time:	0	4
%B:	20	50

  
**Flowrate:** 2.0mL/min  
**Detector:** ELSD 2000

### Imported Ale

CHROM  
9351



1. Fructose
2. Glucose
3. Maltose
4. Maltotriose
5. Maltopentaose
6. Maltohexaose
7. Maltoheptaose

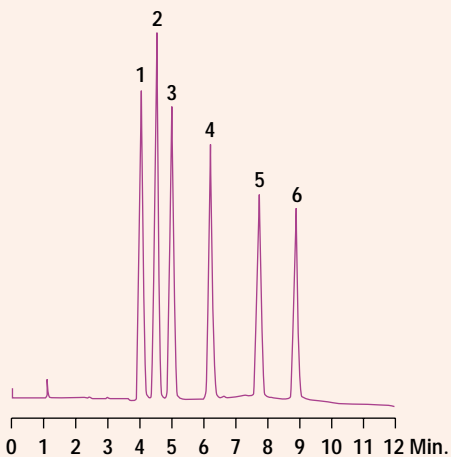
**Column:** Prevail™ Carbohydrate ES, 250 x 4.6mm  
**Mobile Phase:** A: CH<sub>3</sub>CN  
 B: H<sub>2</sub>O  
**Gradient**

Time:	0	50
%B:	20	35

  
**Flowrate:** 1.0mL/min  
**Detector:** ELSD 2000

### Simple Sugars

CHROM  
9417



1. Mannitol
2. Fructose
3. Glucose
4. Sucrose
5. Raffinose
6. Stachyose

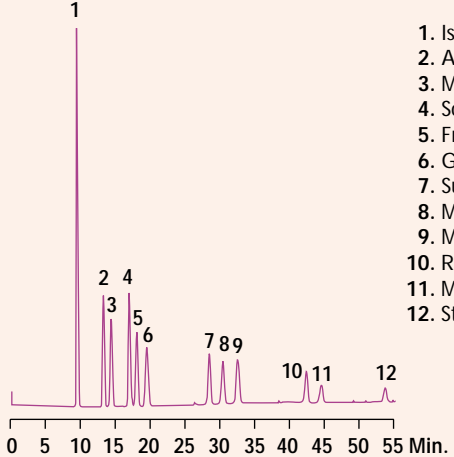
**Column:** Prevail™ Carbohydrate ES, Rocket™, 100 x 7mm  
**Mobile Phase:** A: CH<sub>3</sub>CN  
 B: H<sub>2</sub>O  
**Gradient:**

Time:	0	10
%B:	20	50

  
**Flowrate:** 2.0mL/min  
**Detector:** ELSD 2000

### Components Frequently Found in Fermentation Broths

CHROM  
9357



1. Iso-erythritol
2. Arabitol
3. Mannitol
4. Sorbitol
5. Fructose
6. Glucose
7. Sucrose
8. Maltitol
9. Maltose
10. Raffinose
11. Maltotriose
12. Stachyose

**Column:** Prevail™ Carbohydrate ES, 250 x 4.6mm  
**Mobile Phase:** A: CH<sub>3</sub>CN  
 B: H<sub>2</sub>O  
**Gradient:**

Time:	0	60
%B:	17	35

  
**Flowrate:** 1.0mL/min  
**Detector:** ELSD 2000

Contact your Alltech office or distributor for current or local prices.

**Alltech**

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## - High Efficiency, No-Bleed LC/MS Columns.

- High Resolving Power
- No-bleed Packings
- Stable Chemistry
- Variety of Formats

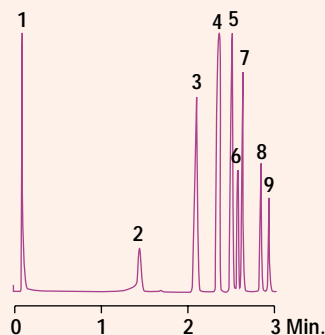
Short-chain organic acids (formic, acetic, trifluoroacetic) and their amine salts are often used as mobile phase modifiers in LC/MS systems because of their high volatility, leading to enhanced detector sensitivity. Alltech introduces Prevail™ LC/MS columns, which are exceedingly stable in these popular mobile phases. Prevail™ LC/MS columns have been tested under rigorous pH 1.0 conditions to ensure detector baseline stability by eliminating column bleed.

Prevail™ bonded phases use high purity, small particle silica. The highly stable bonding chemistry provides high efficiency, long column life and better chromatography through reduced silanol interaction. This results in increased sensitivity and high resolution, which delivers a more concentrated LC fraction to the MS interface.

Prevail™ columns offer the greatest mobile phase versatility, using 100% aqueous to 100% organic mobile phases without phase collapse. This material excels under a full spectrum of mobile phase conditions, including stability to pH1.0.

### Fast Gradient

CHROM-9460

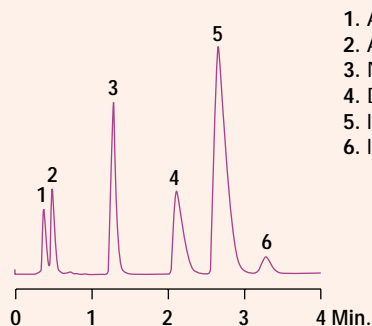


1. Uracil
2. Theophylline
3. Acetophenone
4. Propiophenone
5. Butyrophenone
6. Benzophenone
7. Valerophenone
8. Heptanophenone
9. Octanophenone

**Column:** Prevail™ C18, 3µm, 20 x 2.1mm, Expedite™  
**Mobile Phase:** A: 0.1% TFA in H<sub>2</sub>O  
 B: 0.08% TFA in CH<sub>3</sub>CN  
**Gradient:** Time: 0 | 2 | 3  
 %B: 0 | 100 | 100  
**Flowrate:** 1.0mL/min  
**Detector:** UV at 254nm

### Analgesics/Anti-inflammatories

CHROM-9445

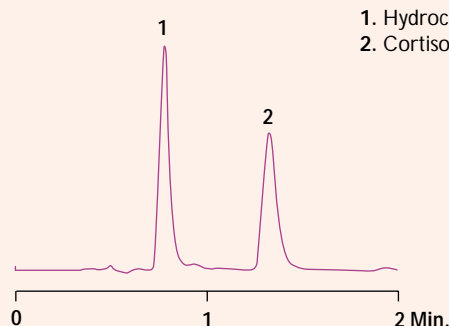


1. Aspirin
2. Acetaminophen
3. Naproxen
4. Diclofenac
5. Indomethane
6. Ibuprofen

**Column:** Prevail™ C18, 3µm, 50 x 2.1mm  
**Mobile Phase:** 50mM Ammonium Acetate, pH 5.4:  
 CH<sub>3</sub>CN(60:40)  
**Flowrate:** 0.3mL/min  
**Detector:** UV at 254nm

### Corticosteroids

CHROM-9444

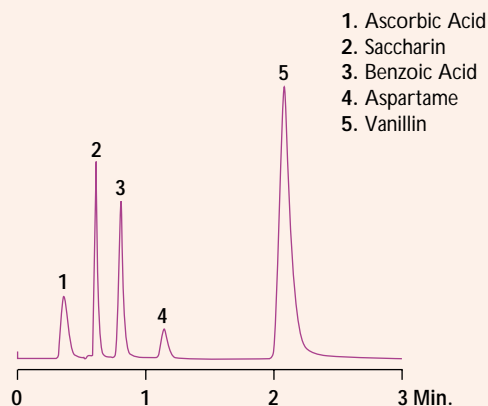


1. Hydrocortisone
2. Cortisone

**Column:** Prevail™ C18, 3µm, 50 x 2.1mm  
**Mobile Phase:** 50mM Ammonium Acetate, pH 5.4:  
 CH<sub>3</sub>CN (45:55)  
**Flowrate:** 0.3mL/min  
**Detector:** UV at 230nm

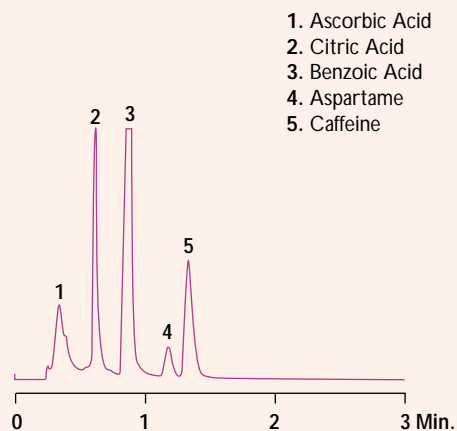
### Beverage Additives

CHROM-9446



### Diet Cola

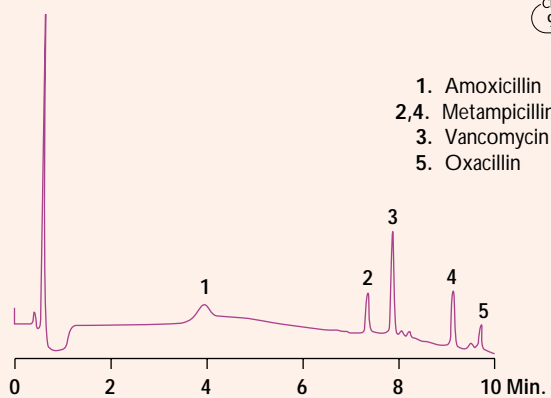
CHROM-9447



**Column:** Prevail™ C18, 3µm, 50 x 2.1mm  
**Mobile Phase:** 50mM Ammonium Acetate, pH 5.4:  
CH<sub>3</sub>CN (80:20)  
**Flowrate:** 0.3mL/min  
**Detector:** UV at 230nm

### Antibacterials

CHROM-9427



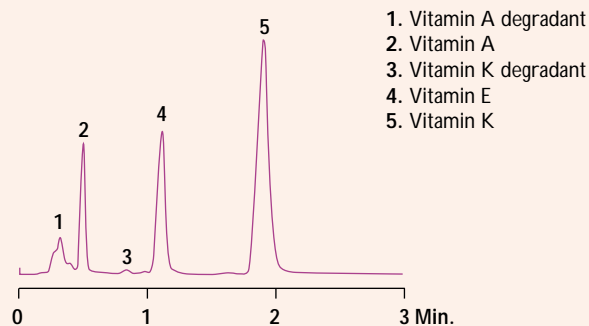
**Column:** Prevail™ C18, 3µm, 50 x 2.1mm  
**Mobile Phase:** A: 50mM Ammonium Acetate pH 5.4  
B: CH<sub>3</sub>CN  
**Gradient:**

Time:	0	8	10
%B:	0	40	40

  
**Flowrate:** 0.3mL/min  
**Detector:** UV at 220nm

### Fat Soluble Vitamins

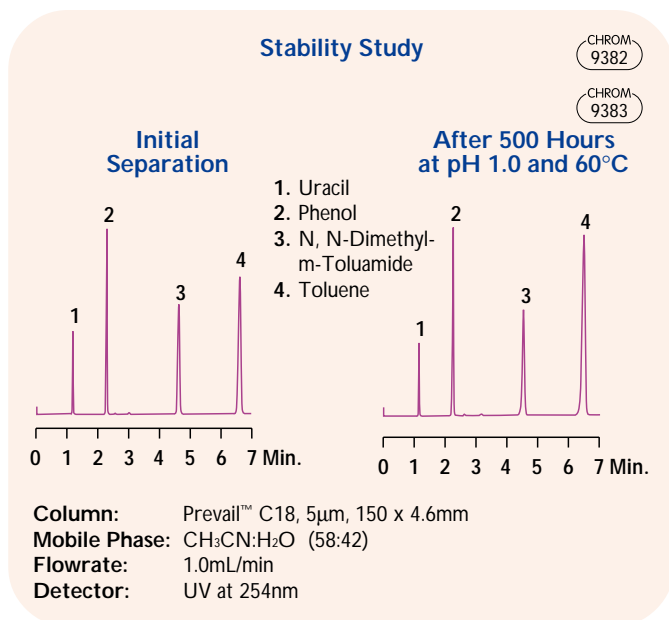
CHROM-9434



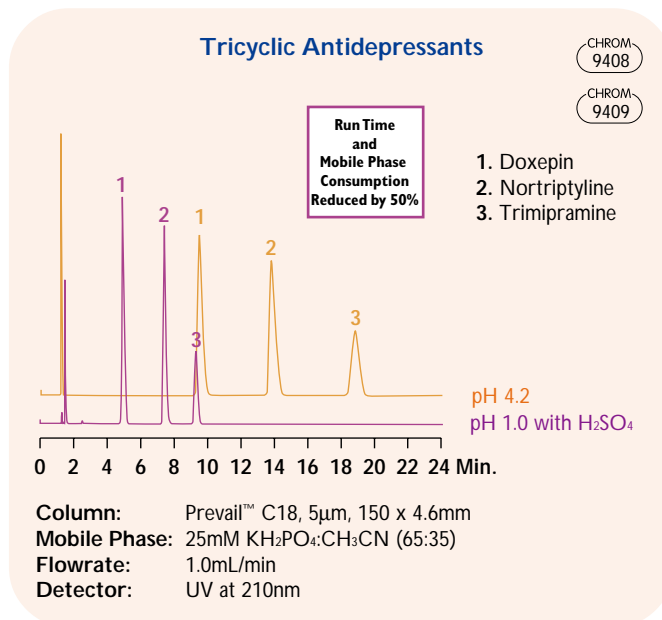
**Column:** Prevail™ C18, 3µm, 50 x 2.1mm  
**Mobile Phase:** MeOH  
**Flowrate:** 0.5mL/min  
**Detector:** UV at 220nm

# Exceptional Stability . . .

- Long Column Life Even Under Extreme Conditions.

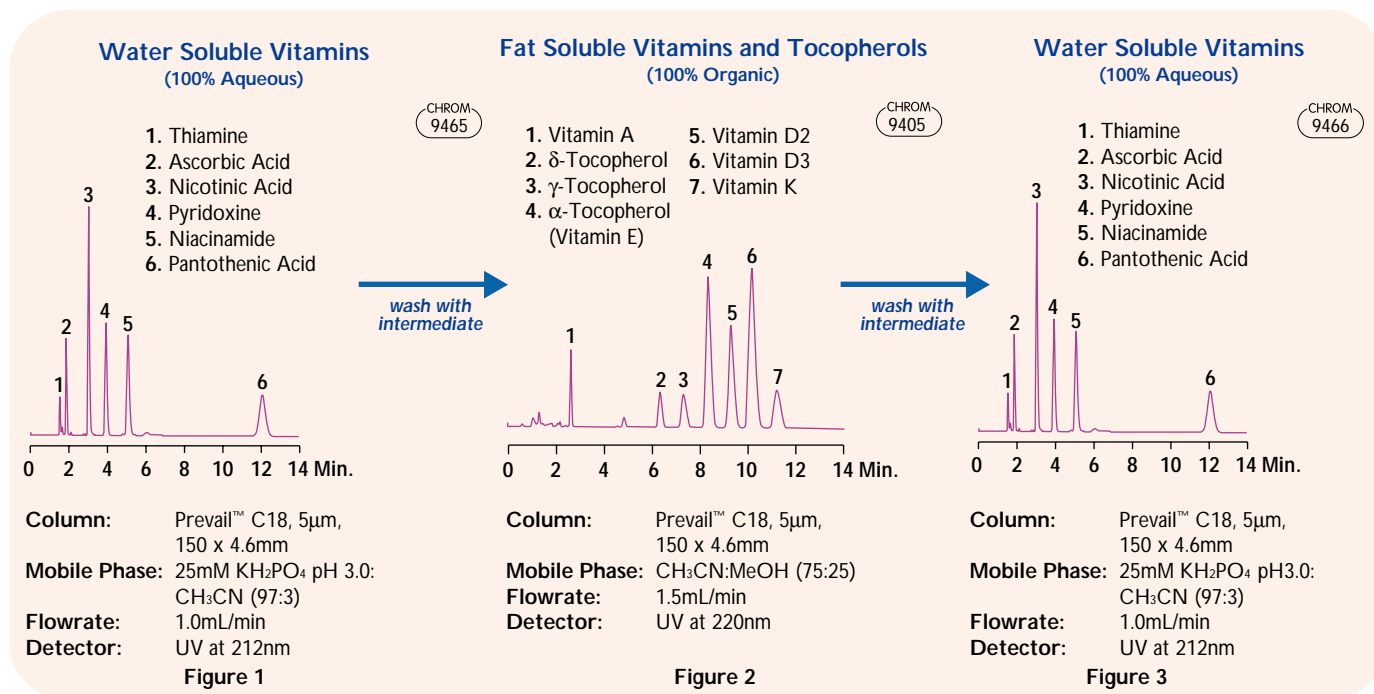


A Prevail™ C18 Column was washed for 500 hours at 60°C with an acetonitrile:water mobile phase adjusted to pH 1.0 with sulfuric acid. The column showed no chromatographic change.



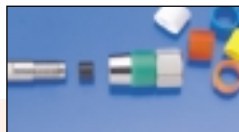
Take advantage of Prevail™'s stability by analyzing amines at lower pH to reduce the analysis time. The analysis done at pH 1.0 is completed in half the time.

## Switch Between 100% Aqueous and 100% Organic Mobile Phases On the Same Column



Prevail™ columns have highly stable bonded phases that let you use one column for multiple mobile phase conditions. Even switching between extremes such as 100% aqueous (**Figure 1**) to 100% organic conditions (**Figure 2**), and back to 100% aqueous (**Figure 3**) on a routine basis is possible, provided that mobile phases are miscible.

## Prevail™ Analytical Columns



### Prevail™ Columns

PACKING	PARTICLE SIZE	LENGTH X ID	INDUSTRY STANDARD		PRICE
			PART NO.	WATERS PART NO.	
<b>C18</b>	3µm	150 x 2.1mm	99200	99201	
	3µm	50 x 4.6mm	43829	43901	
	3µm	100 x 4.6mm	99202	99203	
	3µm	150 x 4.6mm	99204	99205	
	5µm	150 x 2.1mm	99206	99207	
	5µm	150 x 4.6mm	99208	99209	
	5µm	250 x 4.6mm	99210	99211	
	<b>C8</b>	3µm	150 x 2.1mm	99212	99213
3µm		50 x 4.6mm	43922	43923	
3µm		100 x 4.6mm	99214	99215	
3µm		150 x 4.6mm	99216	99217	
5µm		150 x 2.1mm	99218	99219	
5µm		150 x 4.6mm	99224	99228	
5µm		250 x 4.6mm	99229	99230	
<b>Phenyl</b>	3µm	150 x 2.1mm	99231	99232	
	3µm	50 x 4.6mm	43869	43911	
	3µm	100 x 4.6mm	99233	99234	
	3µm	150 x 4.6mm	99235	99236	
	5µm	150 x 2.1mm	99237	99238	
	5µm	150 x 4.6mm	99239	99240	
	5µm	250 x 4.6mm	99241	99242	
	<b>Cyano</b>	3µm	150 x 2.1mm	99243	99244
3µm		50 x 4.6mm	43924	43925	
3µm		100 x 4.6mm	99245	99246	
3µm		150 x 4.6mm	99247	99248	
5µm		150 x 2.1mm	99249	99250	
5µm		150 x 4.6mm	99251	99252	
5µm		250 x 4.6mm	99253	99254	
<b>Amino</b>		3µm	150 x 2.1mm	99255	99256
	3µm	50 x 4.6mm	43926	43927	
	3µm	100 x 4.6mm	99257	99258	
	3µm	150 x 4.6mm	99259	99260	
	5µm	150 x 2.1mm	99261	99262	
	5µm	150 x 4.6mm	99263	99264	
	5µm	250 x 4.6mm	99265	99266	
	<b>Silica</b>	3µm	150 x 2.1mm	99267	99268
3µm		50 x 4.6mm	43842	43921	
3µm		100 x 4.6mm	99269	99270	
3µm		150 x 4.6mm	99271	99272	
5µm		150 x 2.1mm	99273	99274	
5µm		150 x 4.6mm	99275	99276	
5µm		250 x 4.6mm	99277	99278	
<b>OA</b>		5µm	150 x 4.6mm	88640	88740
	5µm	250 x 4.6mm	88645	88745	
	3µm	100 x 4.6mm	88650	88750	
	3µm	150 x 4.6mm	88655	88755	
	<b>Amide</b>	5µm	150 x 4.6mm	88660	88680
5µm		250 x 4.6mm	88665	88685	
3µm		100 x 4.6mm	88670	88690	
3µm		150 x 4.6mm	88675	88694	
<b>Carbohydrate ES</b>		5µm	150 x 4.6mm	—	35102
	5µm	250 x 4.6mm	—	35101	

### Prevail™ LC/MS Columns



PACKING	PARTICLE SIZE	LENGTH X ID	INDUSTRY STANDARD		
			PART NO.	PRICE	
<b>C18</b>	3µm	150 x 2.1mm	99200		
	3µm	100 x 2.1mm	43871		
	3µm	50 x 2.1mm	43818		
	<b>Expedite™</b>	3µm	20 x 2.1mm	43827	
	<b>Expedite™</b>	3µm	10 x 2.1mm	43861	
	<b>Expedite™</b>	3µm	20 x 4.6mm	43804	
	<b>Expedite™</b>	3µm	10 x 4.6mm	43878	
	3µm	150 x 1.0mm	43843		
	3µm	100 x 1.0mm	43831		
	3µm	33 x 7mm	99280		
<b>Phenyl</b>	3µm	150 x 2.1mm	99231		
	3µm	100 x 2.1mm	43872		
	3µm	50 x 2.1mm	43819		
	<b>Expedite™</b>	3µm	20 x 2.1mm	43885	
	<b>Expedite™</b>	3µm	10 x 2.1mm	43873	
	<b>Expedite™</b>	3µm	20 x 4.6mm	43815	
	<b>Expedite™</b>	3µm	10 x 4.6mm	43887	
	3µm	150 x 1.0mm	43859		
	3µm	100 x 1.0mm	43893		
	3µm	33 x 7mm	99282		
<b>Silica</b>	3µm	150 x 2.1mm	99267		
	3µm	100 x 2.1mm	43805		
	3µm	50 x 2.1mm	43868		
	<b>Expedite™</b>	3µm	20 x 2.1mm	43826	
	<b>Expedite™</b>	3µm	10 x 2.1mm	43841	
	<b>Expedite™</b>	3µm	20 x 4.6mm	43816	
	<b>Expedite™</b>	3µm	10 x 4.6mm	43858	
	3µm	150 x 1.0mm	43806		
	3µm	100 x 1.0mm	43832		
	3µm	33 x 7mm	99284		

## Prevail™ High Speed Rocket™ Columns



### Prevail™ Rocket™ Columns

PACKING	PART SIZE	LENGTH X ID	PART NO.	PRICE
<b>C18</b>	3µm	53 x 7mm	99279	
	3µm	33 x 7mm	99280	
<b>Phenyl</b>	3µm	53 x 7mm	99281	
	3µm	33 x 7mm	99282	
<b>Silica</b>	3µm	53 x 7mm	99283	
	3µm	33 x 7mm	99284	
<b>OA</b>	3µm	53 x 7mm	50755	
	3µm	33 x 7mm	99292	
<b>Amide</b>	3µm	53 x 7mm	50775	
	3µm	33 x 7mm	99298	
<b>Carbohydrate ES</b>	5µm	53 x 7mm	35104	
	5µm	100 x 7mm	35103	

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## New Expedite™ LC/MS Hardware for Fast, Low-Volume Applications

Expedite™ hardware is available in 10 or 20mm lengths, and 2.1 or 4.6mm ID.



### Actual Size

20mm



10mm



Expedite your LC/MS analyses with Alltech's high-speed, low-volume Expedite™ hardware. These fast analysis columns packed with high resolution Prevail™ media increase laboratory efficiency by doubling or even tripling sample throughput.

See Page 12,13 & 15 for our full line of Prevail™ LC/MS Columns

## Protect Your Prevail™ Investment with All-Guard™ Cartridges

- **Simple - Fewer Parts, Fewer Seals, Fewer Problems**
- **Fast - Change Cartridges in Seconds Without Tools**
- **Reliable - Pressure and Chromatographically Tested with Test Certificate Supplied**
- **Efficient - Matched Media & Low Dead Volume Maintain Chromatographic Performance**



### Prevail™ All-Guard™ Cartridges\*

PACKING	PART SIZE	LENGTH x ID	QTY	PART NO.	PRICE
C18	5µm	7.5 x 4.6mm	3	99286	
C8	5µm	7.5 x 4.6mm	3	99287	
Phenyl	5µm	7.5 x 4.6mm	3	99288	
Cyano	5µm	7.5 x 4.6mm	3	99289	
Amino	5µm	7.5 x 4.6mm	3	99290	
Silica	5µm	7.5 x 4.6mm	3	99291	
OA	5µm	7.5 x 4.6mm	3	96429	
Amide	5µm	7.5 x 4.6mm	3	96443	
All-Guard™ Guard Cartridge Holder			1	80101	

\*Requires Guard Holder



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Alltech Corporate Headquarters:  
2051 Waukegan Road • Deerfield, IL 60015  
Phone: 847-948-8600 • Fax: 847-948-0477  
Email: [alltech@alltechemail.com](mailto:alltech@alltechemail.com)  
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