Prevail™ HPLC Columns

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

- *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*

Alltech

UNP

Bulletin #460A

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

Aqueous Mobile Phases . . .

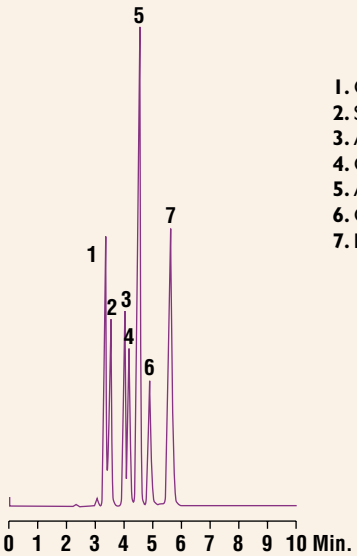
- Separate Highly Polar Analytes Without Fear of Phase Collapse

- ***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.

Underivatized Amino Acids

CHROM 9449



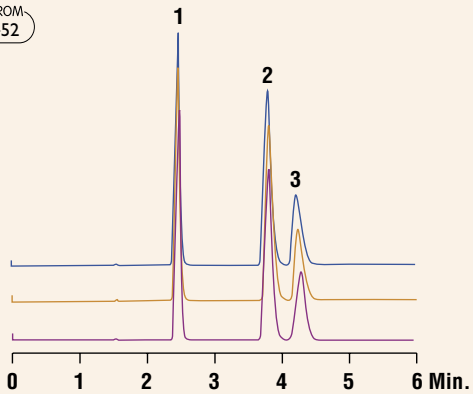
1. Glycine (Gly)
2. Serine (Ser)
3. Aspartic Acid (Asp)
4. Glutamine (Gln)
5. Alanine (Ala)
6. Glutamic Acid (Glu)
7. Lysine (Lys)

Column: Prevail™ C18, 5µm, 250 x 4.6mm
Mobile Phase: 5mM Heptafluorobutyric Acid pH 1.0 w/ 0.7% TFA
Flow Rate: 1.0mL/min
Detector: ELSD

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

CHROM 9450
CHROM 9451
CHROM 9452

Prevail™ C18, 5µm, 150 x 4.6mm



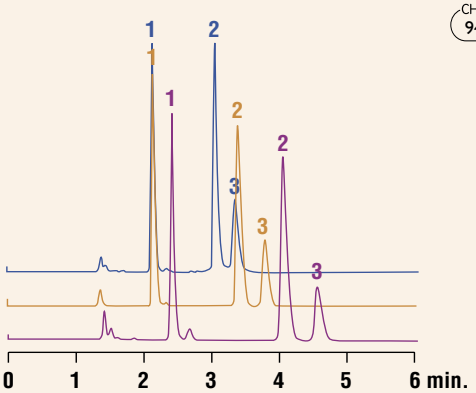
Catecholamines

1. Norepinephrine
2. Epinephrine
3. 5-Hydroxydopamine

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

CHROM 9453
CHROM 9454
CHROM 9455

Competitor A C18, 5µm, 150 x 4.6mm



Mobile Phase: 25mM KH_2PO_4, pH 2.7
Flow Rate: 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.

The GRACE Davison Product Lines

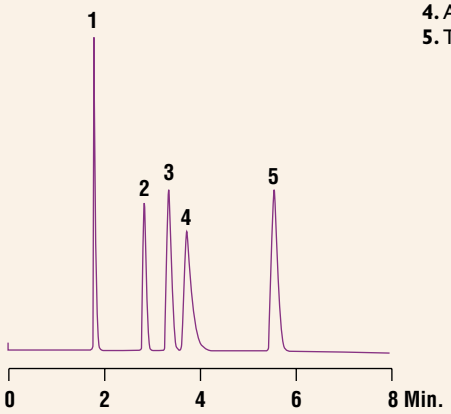
Alltech DAVISIL CROM JONES CHROMATOGRAPHY mopcol VYDAC

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

Nucleic Acid Bases

CHROM 9411

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

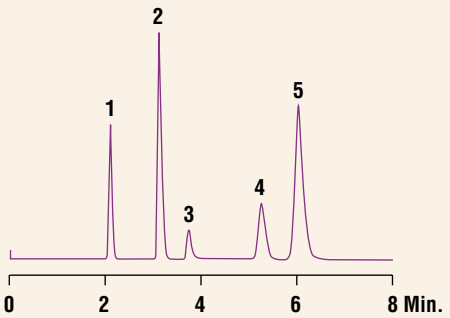


Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4 pH 3.0:CH_3CN (98:2)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

Nucleosides

CHROM 9410

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

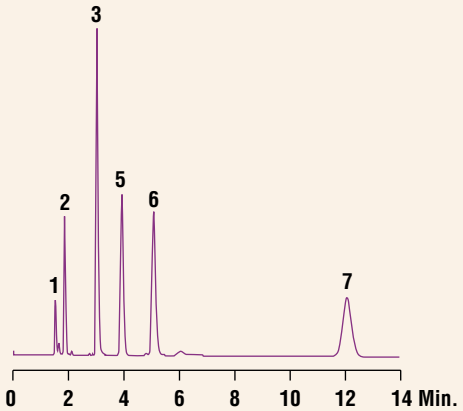


Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4 pH 3.0:CH_3CN (96:4)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

Water Soluble Vitamin Standards

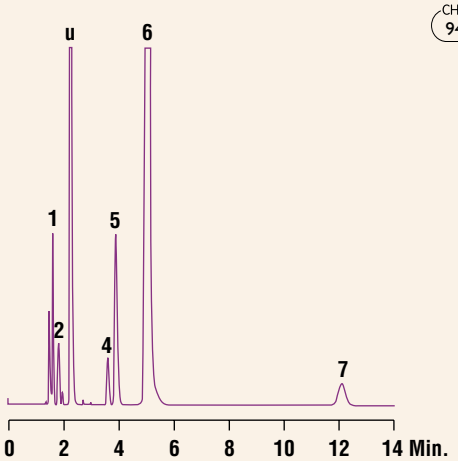
CHROM 9388

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



Water Soluble Vitamins From Multi-Vitamin Tablet

CHROM 9456



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4, pH 3.0:CH_3CN (97:3)
Flow Rate: 1.0mL/min
Detector: UV at 212nm

Organic Mobile Phases . . .

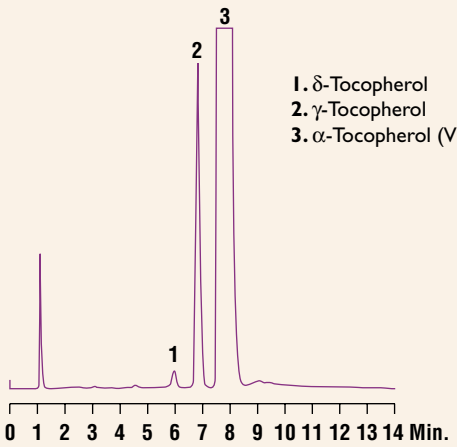
- Separate Hydrophobic Analytes with Excellent Retention and Peak Shape

- ***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™ packing'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



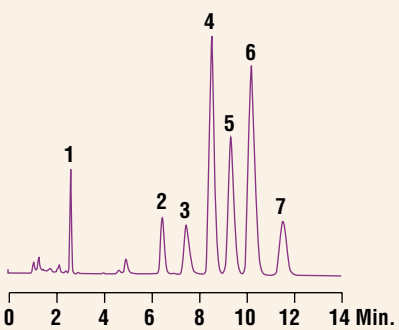
1. δ-Tocopherol
2. γ-Tocopherol
3. α-Tocopherol (Vitamin E)

Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: CH_3CN:MeOH (75:25)
Flow Rate: 1.5mL/min
Detector: ELSD

Fat-Soluble Vitamins and Tocopherols

CHROM 9390

Prevail™ C18, 5µm, 150 x 4.6mm

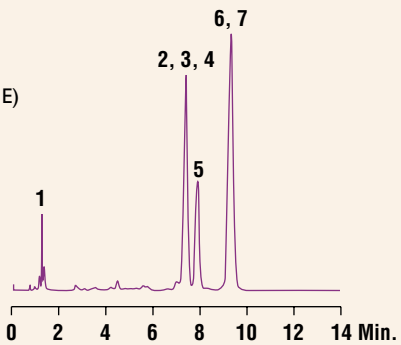


1. Vitamin A
2. δ-Tocopherol
3. γ-Tocopherol
4. α-Tocopherol (Vitamin E)
5. Vitamin D2
6. Vitamin D3
7. Vitamin K

Mobile Phase: CH_3CN:MeOH (75:25)
Flow Rate: 1.5mL/min
Detector: UV at 220nm

CHROM 9457

Competitor B C18, 5µm, 150 x 4.6mm

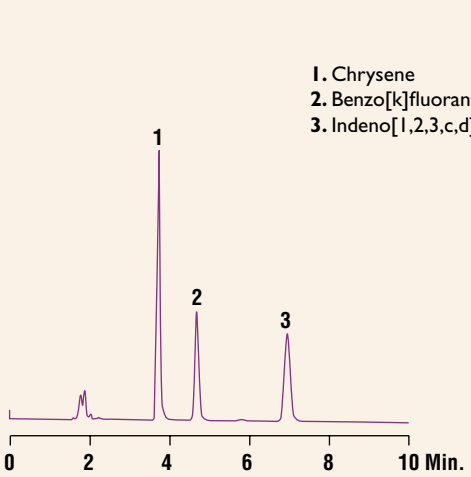


Mobile Phase: CH_3CN:MeOH (75:25)
Flow Rate: 1.5mL/min
Detector: UV at 220nm

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

Polyaromatic Hydrocarbons

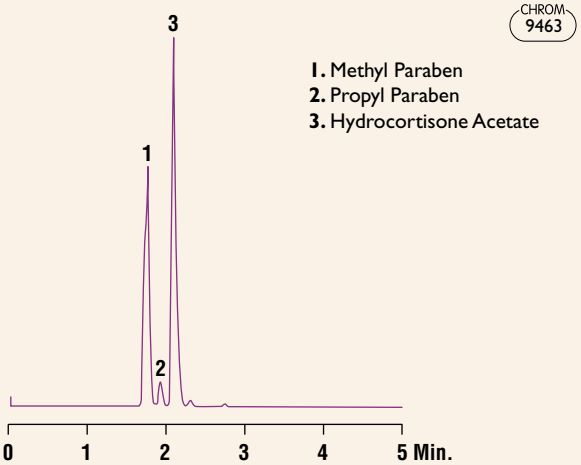
CHROM 9391



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: CH_3CN:MeOH (75:25)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

Hydrocortisone Acetate Cream

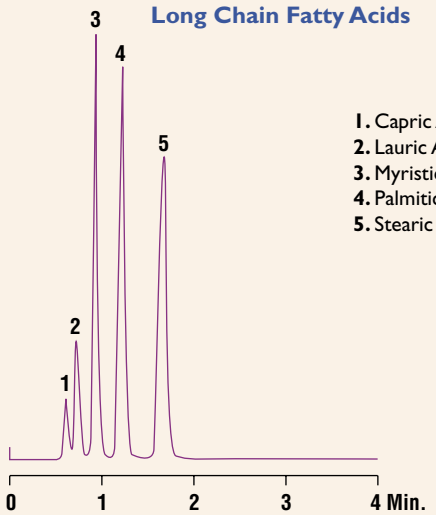
CHROM 9463



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: CH_3CN:H_2O (90:10)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

Long Chain Fatty Acids

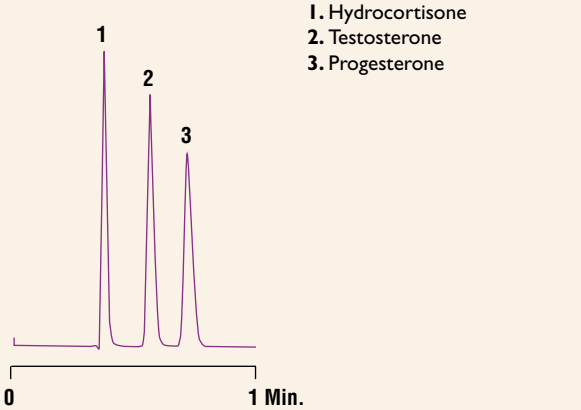
CHROM 9459



Column: Prevail™ C18, 3µm, 53 x 7mm, Rocket™
Mobile Phase: CH_3CN:MeOH (75:25)
Flow Rate: 3.5mL/min
Detector: ELSD

Steroids

CHROM 9392



Column: Prevail™ C18, 3µm, 53 x 7mm, Rocket™
Mobile Phase: MeOH:H_2O (90:10)
Flow Rate: 4.5mL/min
Detector: UV at 254nm

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

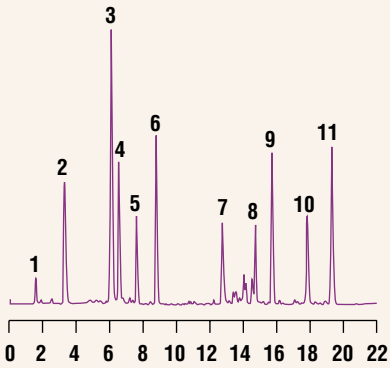
Contact your Alltech office or distributor for current or local prices.

. . . and Everything in Between

- The Most Versatile 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. Pipericillin
10. Bacampacillin
11. Oxacillin

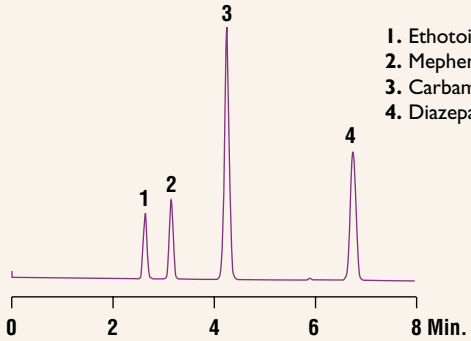
Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: **A:** 25mM KH_2PO_4 pH 3.0
B: CH_3CN
Gradient:

Time:	0	15	22
%B:	10	40	40

Flow Rate: 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_2O **B:** CH_3CN
Gradient:

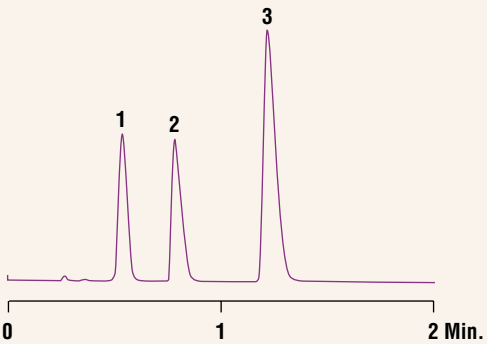
Time:	0	15
%B:	25	60

Flow Rate: 1.5mL/min
Detector: UV at 254nm

Anti-hypertensives

CHROM 9395

1. Metoprolol
2. Oxprenolol
3. Propranolol

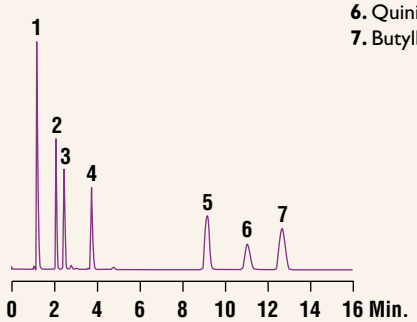


Column: Prevail™ C18, 3µm, 53 x 7mm, Rocket™
Mobile Phase: 25mM KH_2PO_4 pH 3.0:CH_3CN (70:30)
Flow Rate: 4.0mL/min
Detector: UV at 220nm

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_2PO_4 pH 2.5:CH_3CN (35:65)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

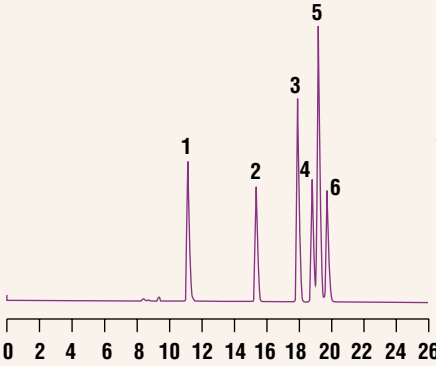
The GRACE Davison Product Lines

Alltech DAVISIL CROM JONES CHROMATOGRAPHY mopcol VYDAC

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

Polyphenolic Flavonoids

CHROM 9397



1. Myricetin
2. Quercetin
3. Naringenin
4. Hesperetin
5. Apigenin
6. Kaempferol

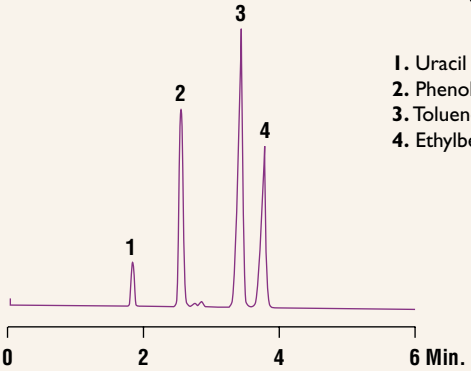
Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: **A:** 25mM KH_2PO_4 pH 2.5
B: CH_3CN
Gradient:

Time:	0	15	26
%B:	20	40	40

Flow Rate: 1.0mL/min
Detector: UV at 280nm

Aromatics

CHROM 9398



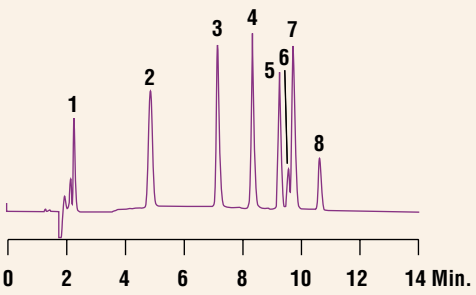
1. Uracil
2. Phenol
3. Toluene
4. Ethylbenzene

Column: Prevail™ Phenyl, 5µm, 150 x 4.6mm
Mobile Phase: H_2O:CH_3CN (50:50)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

Peptides

CHROM 9399

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



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: **A:** 0.15%TFA in H_2O
B: 0.13% TFA in CH_3CN:H_2O (95:5)
Gradient:

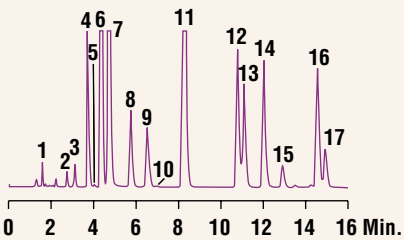
Time:	0	15
%B:	20	55

Flow Rate: 1.0mL/min
Detector: UV at 220nm

Polyaromatic Hydrocarbons

CHROM 9400

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



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: **A:** H_2O
B: CH_3CN
Gradient:

Time:	0	4	15
%B:	72	72	100

Flow Rate: 1.5mL/min
Detector: UV at 254nm

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

Prevail™ Amide Columns

- 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***

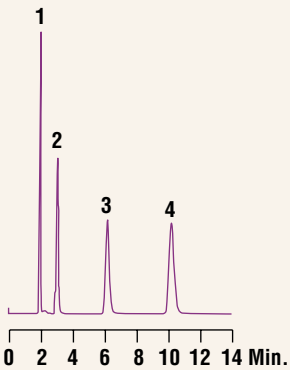
A polar-embedded group inserted into the hydrophobic chain of the Prevail™ Amide phase minimizes interaction of polar samples with silanols, providing symmetrical peaks for a wide variety of applications. The amide phase is especially useful at neutral pH where amines can interact strongly with ionized 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. Fenprofen

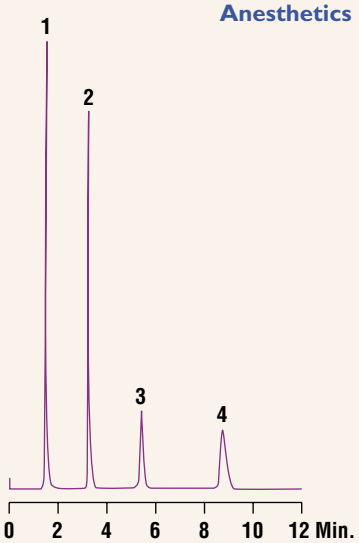


Column: Prevail™ Amide, 5µm, 150 x 4.6mm
Mobile Phase: 20mM K_2HPO_4, pH7.0:CH_3CN (75:25)
Flow Rate: 1.0mL/min
Detector: UV at 210nm

Anesthetics

CHROM 9436

1. p-Aminobenzoic Acid
2. Benzocaine
3. Butacaine
4. Tetracaine

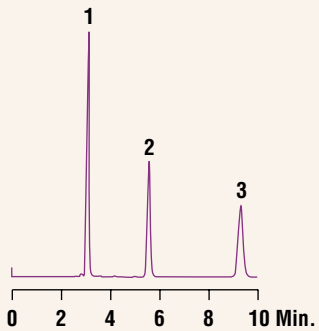


Column: Prevail™ Amide, 3µm, 150 x 4.6mm
Mobile Phase: 20mM K_2HPO_4, pH 7.0:CH_3CN (43:57)
Flow Rate: 1.0mL/min
Detector: UV at 210nm

Anilines

CHROM 9412

1. Aniline
2. Dimethylaniline
3. Diethylaniline



Column: Prevail™ Amide, 5µm, 150 x 4.6mm
Mobile Phase: 20mM K_2HPO_4, pH7.0:CH_3CN (50:50)
Flow Rate: 1.0mL/min
Detector: UV at 210nm

Prevail™ Organic Acid Columns

- 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***

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.

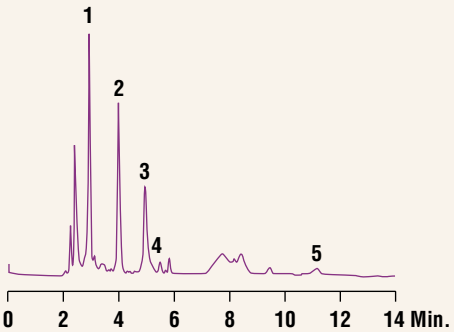
Need more resolution? Try the 250 x 4.6mm Prevail™ OA column. Want faster analyses? Choose the Prevail™ Organic Acid Rocket™ column.

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

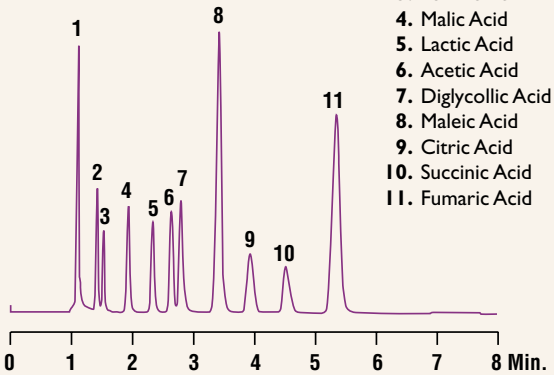


Column: Prevail™ Organic Acid, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4, pH 2.5
Flow Rate: 0.7mL/min
Detector: UV at 210nm

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

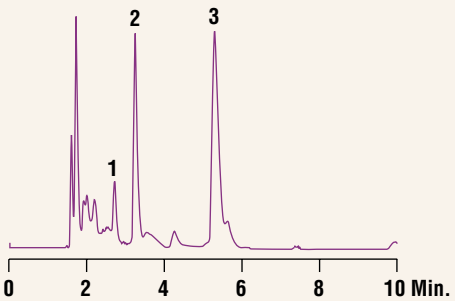


Column: Prevail™ Organic Acid, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4, pH 2.5
Flow Rate: 1.5mL/min
Detector: UV at 210nm

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_2PO_4, pH 2.5
Flow Rate: 1.0mL/min
Detector: UV at 210nm

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

Prevail™ Carbohydrate ES Columns

– *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 ELSD for the Carbohydrate Solution: Enhanced Detector Sensitivity, Flat Baselines, Gradient Capability, and Reduced Run Times***

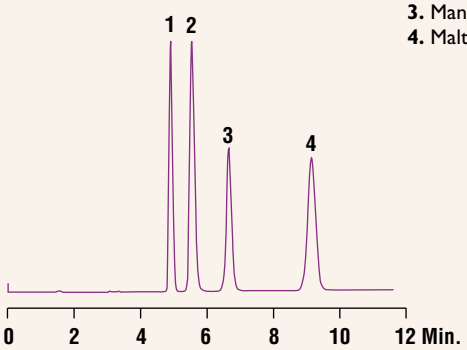
Prevail™ Carbohydrate ES offers performance superior to traditional amino columns and ion exclusion columns. Because of its rugged bonding technology, Carbohydrate ES delivers quiet, stable baselines and excellent peak shapes long after silica-based amino columns have died. Carbohydrate ES can also separate 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 Evaporative Light Scattering Detection (ELSD). Gradients are powerful and effective when done with the Carbohydrate ES Column/ELSD 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 i.d. Rocket™ formats offer the advantages of reduced backpressures and faster separations.

Sugar Alcohols

CHROM 9352

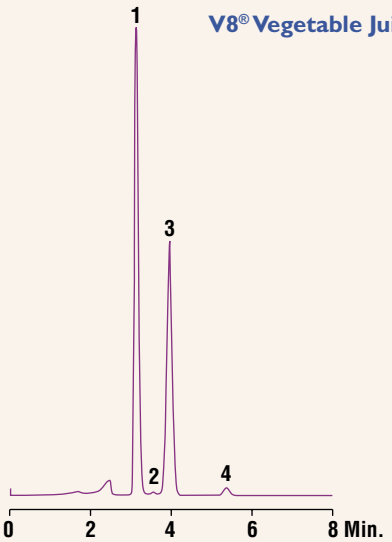


1. Iso-erythritol
2. Xylitol
3. Mannitol
4. Maltitol

Column: Prevail™ Carbohydrate ES, 250 x 4.6mm
Mobile Phase: $CH_3CN:H_2O$ (70:30)
Flow Rate: 1.0mL/min
Detector: ELSD

V8® Vegetable Juice

CHROM 9485

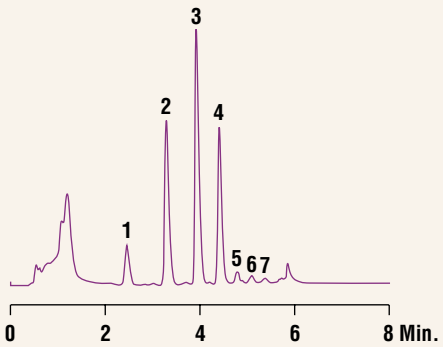


1. Mannitol
2. Fructose
3. Glucose
4. Sucrose

Column: Prevail™ Carbohydrate ES, 5µm, 100 x 7mm, Rocket™
Mobile Phase: $CH_3CN:H_2O$ (80:20)
Flow Rate: 2.0mL/min
Detector: ELSD

Sweetened Vending Machine Coffee

CHROM 9477



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

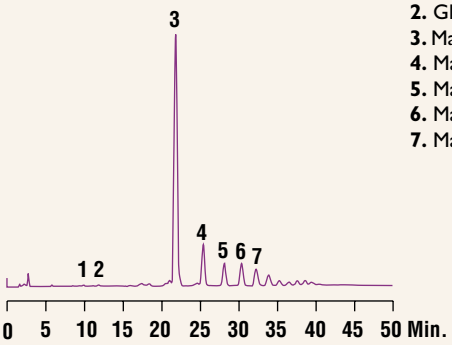
Column: Prevail™ Carbohydrate ES, 53 x 7mm, Rocket™
Mobile Phase: **A:** CH_3CN
B: H_2O
Gradient

Time:	0	4
%B:	20	50

Flow Rate: 2.0mL/min
Detector: ELSD

Imported Ale

CHROM 9351



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

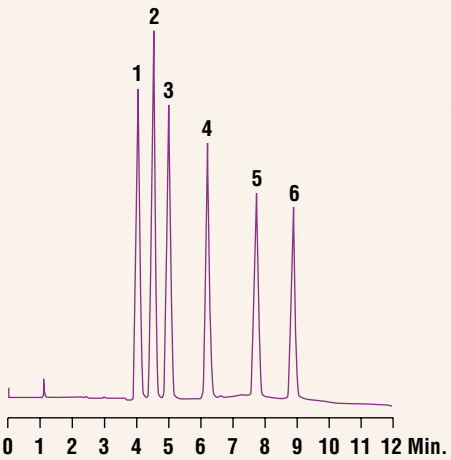
Column: Prevail™ Carbohydrate ES, 250 x 4.6mm
Mobile Phase: **A:** CH_3CN
B: H_2O
Gradient

Time:	0	50
%B:	20	35

Flow Rate: 1.0mL/min
Detector: ELSD

Simple Sugars

CHROM 9417



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

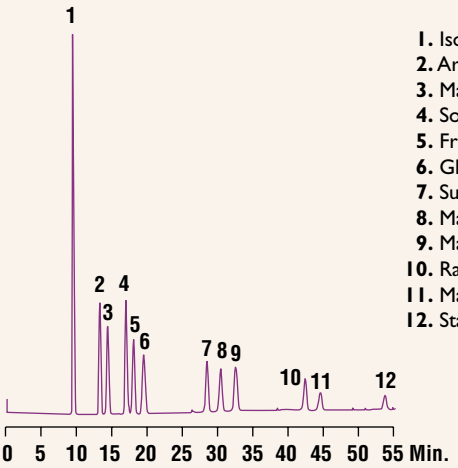
Column: Prevail™ Carbohydrate ES, 100 x 7mm, Rocket™
Mobile Phase: **A:** CH_3CN
B: H_2O
Gradient:

Time:	0	10
%B:	20	50

Flow Rate: 2.0mL/min
Detector: ELSD

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_3CN
B: H_2O
Gradient:

Time:	0	60
%B:	17	35

Flow Rate: 1.0mL/min
Detector: ELSD

Prevail™ LC/MS Columns

- *High Efficiency, No-Bleed LC/MS Columns*

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

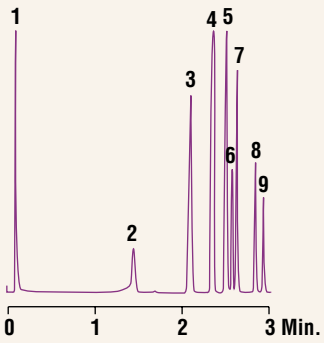
Short-chain organic acids (formic, acetic, trifluoroacetic) and their amine salts are often used as mobile phase modifiers in LC/MS systems because of their high volatility, leading to enhanced detector sensitivity. Alltech introduces Prevail™ LC/MS columns, which are exceedingly stable in these popular 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

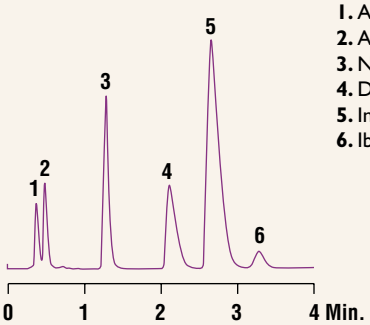
Column: Prevail™ C18, 3µm, 20 x 2.1mm, Expedite™
Mobile Phase: **A:** 0.1% TFA in H_2O
B: 0.08% TFA in CH_3CN
Gradient:

Time:	0	2	3
%B:	0	100	100

Flow Rate: 1.0mL/min
Detector: UV at 254nm

Analgesics/Anti-inflammatories

CHROM 9445

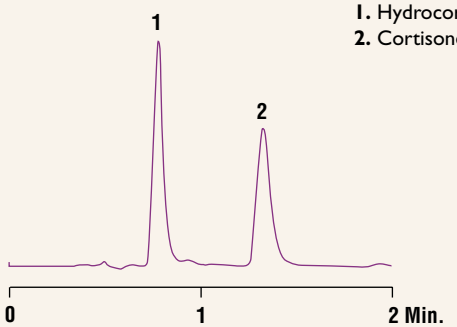


1. Aspirin
2. Acetaminophen
3. Naproxen
4. Diclofenac
5. Indomethane
6. Ibuprofen

Column: Prevail™ C18, 3µm, 50 x 2.1mm
Mobile Phase: 50mM Ammonium Acetate, pH 5.4: CH_3CN(60:40)
Flow Rate: 0.3mL/min
Detector: UV at 254nm

Corticosteroids

CHROM 9444

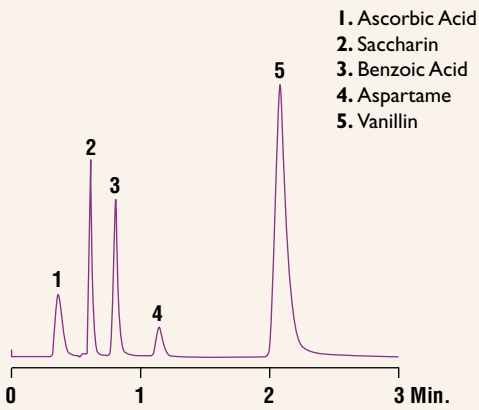


1. Hydrocortisone
2. Cortisone

Column: Prevail™ C18, 3µm, 50 x 2.1mm
Mobile Phase: 50mM Ammonium Acetate, pH 5.4: CH_3CN (45:55)
Flow Rate: 0.3mL/min
Detector: UV at 230nm

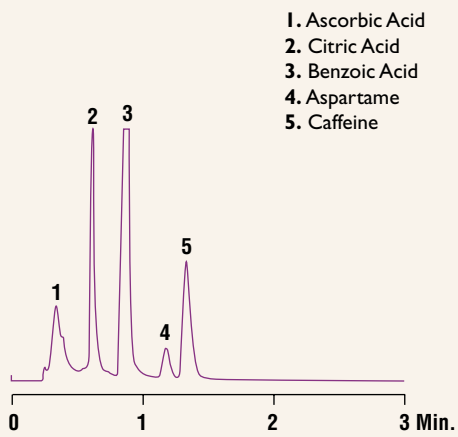
Beverage Additives

CHROM 9446



Diet Cola

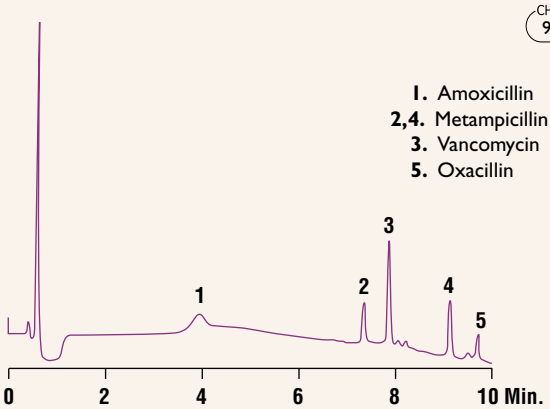
CHROM 9447



Column: Prevail™ C18, 3µm, 50 x 2.1mm
Mobile Phase: 50mM Ammonium Acetate, pH 5.4: CH_3CN (80:20)
Flow Rate: 0.3mL/min
Detector: UV at 230nm

Antibacterials

CHROM 9427



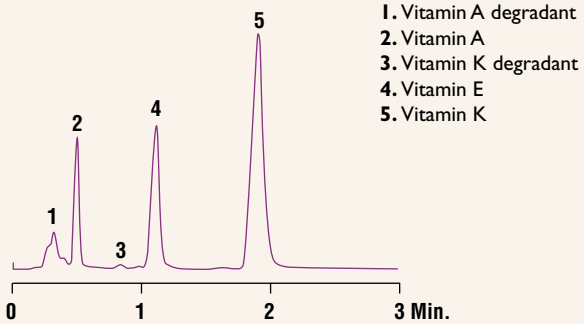
Column: Prevail™ C18, 3µm, 50 x 2.1mm
Mobile Phase: **A:** 50mM Ammonium Acetate pH 5.4
B: CH_3CN
Gradient:

Time:	0	8	10
%B:	0	40	40

Flow Rate: 0.3mL/min
Detector: UV at 220nm

Fat Soluble Vitamins

CHROM 9434



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

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

Exceptional Stability . . .

- Long Column Life Even Under Extreme Conditions

Stability Study

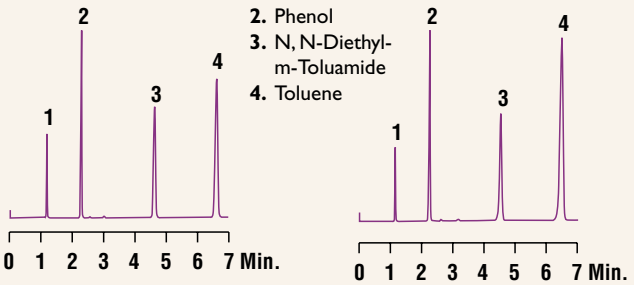
CHROM 9382

CHROM 9383

Initial Separation

After 500 Hours at pH 1.0 and 60°C

1. Uracil
2. Phenol
3. N, N-Diethyl-m-Toluamide
4. Toluene



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: $CH_3CN:H_2O$ (58:42)
Flow Rate: 1.0mL/min
Detector: UV at 254nm

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.

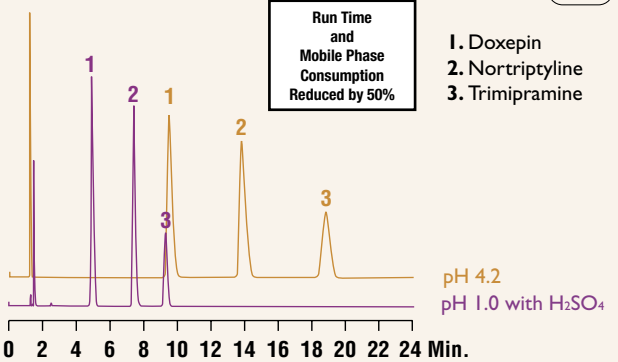
Tricyclic Antidepressants

CHROM 9408

CHROM 9409

Run Time and Mobile Phase Consumption Reduced by 50%

1. Doxepin
2. Nortriptyline
3. Trimipramine



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4:CH_3CN (65:35)
Flow Rate: 1.0mL/min
Detector: UV at 210nm

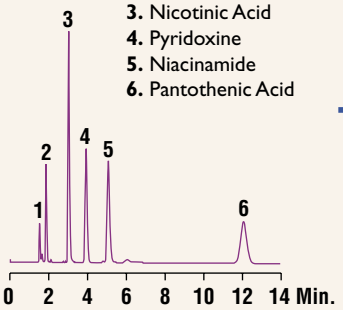
Take advantage of the Prevail™ Column's stability by analyzing amines at lower pH to reduce the analysis time. The analysis done at pH 1.0 is completed in half the time.

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

Water Soluble Vitamins (100% Aqueous)

CHROM 9465

1. Thiamine
2. Ascorbic Acid
3. Nicotinic Acid
4. Pyridoxine
5. Niacinamide
6. Pantothenic Acid



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4 pH 3.0: CH_3CN (97:3)
Flow Rate: 1.0mL/min
Detector: UV at 212nm

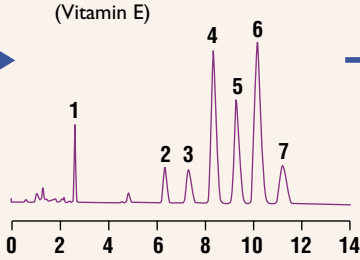
Figure 1

wash with intermediate

Fat Soluble Vitamins and Tocopherols (100% Organic)

CHROM 9405

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



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: CH_3CN:MeOH (75:25)
Flow Rate: 1.5mL/min
Detector: UV at 220nm

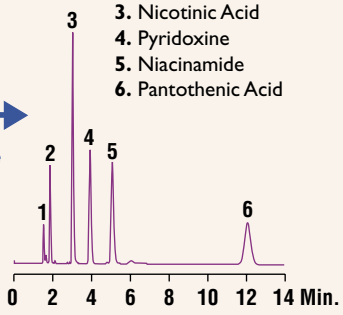
Figure 2

wash with intermediate

Water Soluble Vitamins (100% Aqueous)

CHROM 9466

1. Thiamine
2. Ascorbic Acid
3. Nicotinic Acid
4. Pyridoxine
5. Niacinamide
6. Pantothenic Acid



Column: Prevail™ C18, 5µm, 150 x 4.6mm
Mobile Phase: 25mM KH_2PO_4 pH3.0: CH_3CN (97:3)
Flow Rate: 1.0mL/min
Detector: UV at 212nm

Figure 3

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.

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

Prevail™ Analytical Columns

Prevail™ Columns

Packing	Particle Size	Length x I.D.	Part No.
C18	3µm	150 x 2.1mm	99200
	3µm	50 x 4.6mm	43829
	3µm	100 x 4.6mm	99202
	3µm	150 x 4.6mm	99204
	5µm	150 x 2.1mm	99206
	5µm	150 x 4.6mm	99208
	5µm	250 x 4.6mm	99210
C8	3µm	150 x 2.1mm	99212
	3µm	50 x 4.6mm	43922
	3µm	100 x 4.6mm	99214
	3µm	150 x 4.6mm	99216
	5µm	150 x 2.1mm	99218
	5µm	150 x 4.6mm	99224
	5µm	250 x 4.6mm	99229
Phenyl	3µm	150 x 2.1mm	99231
	3µm	50 x 4.6mm	43869
	3µm	100 x 4.6mm	99233
	3µm	150 x 4.6mm	99235
	5µm	150 x 2.1mm	99237
	5µm	150 x 4.6mm	99239
	5µm	250 x 4.6mm	99241
Cyano	3µm	150 x 2.1mm	99243
	3µm	50 x 4.6mm	43924
	3µm	100 x 4.6mm	99245
	3µm	150 x 4.6mm	99247
	5µm	150 x 2.1mm	99249
	5µm	150 x 4.6mm	99251
	5µm	250 x 4.6mm	99253
Amino	3µm	150 x 2.1mm	99255
	3µm	50 x 4.6mm	43926
	3µm	100 x 4.6mm	99257
	3µm	150 x 4.6mm	99259
	5µm	150 x 2.1mm	99261
	5µm	150 x 4.6mm	99263
	5µm	250 x 4.6mm	99265
Silica	3µm	150 x 2.1mm	99267
	3µm	50 x 4.6mm	43842
	3µm	100 x 4.6mm	99269
	3µm	150 x 4.6mm	99271
	5µm	150 x 2.1mm	99273
	5µm	150 x 4.6mm	99275
	5µm	250 x 4.6mm	99277
OA	5µm	150 x 4.6mm	88640
	5µm	250 x 4.6mm	88645
	3µm	100 x 4.6mm	88650
	3µm	150 x 4.6mm	88655
Amide	5µm	150 x 4.6mm	88660
	5µm	250 x 4.6mm	88665
	3µm	100 x 4.6mm	88670
	3µm	150 x 4.6mm	88675
Carbohydrate ES	5µm	150 x 4.6mm	35102
	5µm	250 x 4.6mm	35101

Prevail™ LC/MS Columns

Prevail™ LC/MS Columns

Packing	Particle Size	Length x I.D.	Part No.
C18	3µm	150 x 2.1mm	99200
	3µm	100 x 2.1mm	43871
	3µm	50 x 2.1mm	43818
Expedite™	3µm	20 x 2.1mm	43827
Expedite™	3µm	10 x 2.1mm	43861
Expedite™	3µm	20 x 4.6mm	43804
Expedite™	3µm	10 x 4.6mm	43878
	3µm	33 x 7.0mm	99280
Phenyl	3µm	150 x 2.1mm	99231
	3µm	100 x 2.1mm	43872
	3µm	50 x 2.1mm	43819
Expedite™	3µm	20 x 2.1mm	43885
Expedite™	3µm	10 x 2.1mm	43873
Expedite™	3µm	20 x 4.6mm	43815
Expedite™	3µm	10 x 4.6mm	43887
	3µm	33 x 7.0mm	99282
Silica	3µm	150 x 2.1mm	99267
	3µm	100 x 2.1mm	43805
	3µm	50 x 2.1mm	43868
Expedite™	3µm	20 x 2.1mm	43826
Expedite™	3µm	10 x 2.1mm	43841
Expedite™	3µm	20 x 4.6mm	43816
Expedite™	3µm	10 x 4.6mm	43858
	3µm	33 x 7.0mm	99284

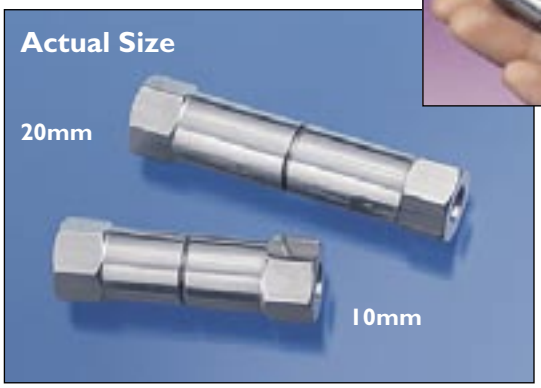
Prevail™ High Speed Rocket™ Columns

Prevail™ Rocket™ Columns

Packing	Particle Size	Length x I.D.	Part No.
C18	3µm	53 x 7.0mm	99279
	3µm	33 x 7.0mm	99280
Phenyl	3µm	53 x 7.0mm	99281
	3µm	33 x 7.0mm	99282
Silica	3µm	53 x 7.0mm	99283
	3µm	33 x 7.0mm	99284
OA	3µm	53 x 7.0mm	50755
	3µm	33 x 7.0mm	99292
Amide	3µm	53 x 7.0mm	50775
	3µm	33 x 7.0mm	99298
Carbohydrate ES	5µm	53 x 7.0mm	35104
	5µm	100 x 7.0mm	35103

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

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



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	Particle Size	Length x i.d.	Qty.	Part No.
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

GRACE Davison

2051 Waukegan Rd • Deerfield, IL 60015
Tel: 847-948-8600 • Fax: 847-948-0477

01/06 #460A

The GRACE Davison Product Lines — Alltech DAVISIL GROM JONES CHROMATOGRAPHY MODCOL VYDAC

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