

Acclaim HPLC and UHPLC columns

Optimal selectivity through innovative chemistries

Designed for separating a variety of analytes, from small neutral and polar molecules to complex mixtures. Ideal for pharmaceutical, environmental, food and beverage and chemical applications.

Diversified selectivities

- Novel and proprietary surface chemistries

Reproducible and reliable

- Strict manufacturing and quality processes

High efficiencies

- For optimum resolution of complex mixtures

Ultra-pure, porous, spherical silica

- Providing consistent quality and performance

Download the Acclaim column selection guide [here](#)

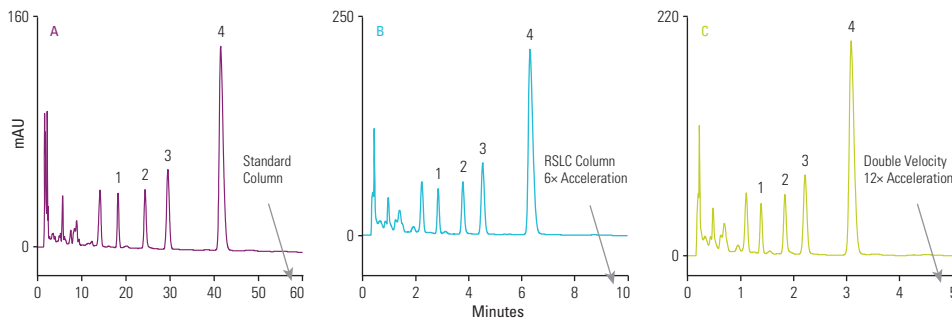
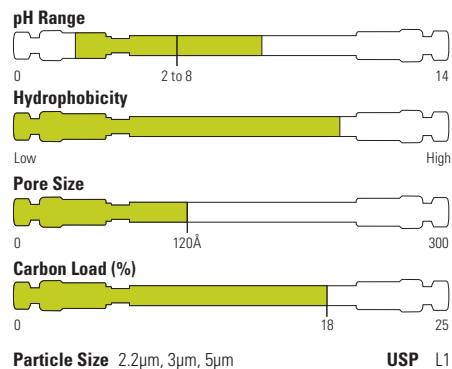
For more information, visit thermofisher.com/acclaim

Acclaim 120 C18

High performance reversed-phase columns for reproducible results

- High hydrophobic retention
- Excellent efficiencies for maximum resolution
- Low silanol activity for excellent peak shapes for basic analytes
- Extremely low bleed, fully compatible with MS

The Acclaim 120 columns are designed for high resolution reversed-phase separations. The very high surface coverage and very low metal content together result in columns with excellent efficiencies. These columns provide exceptional performance for a variety of applications in the pharmaceutical, chemical, environmental and food separations areas.



A: Acclaim 120 C18, 5µm, 150 x 4.6mm
B, C: Acclaim RSLC C18, 2.2µm, 50 x 2.1mm

| | |
|-------------------|---|
| Mobile Phase: | 200mM HOAc in 10% (v/v) MeOH |
| Temperature: | 20°C |
| Flow Rate: | A: 1.00mL/min B: 0.41mL/min C: 0.82mL/min |
| Injection Volume: | A: 10µL B: 1.2µL C: 1.2µL |
| Detection: | UV, 254 nm, A: 1 Hz data rate B: 5 Hz data rate C: 10 Hz data rate |
| Analytes: | 1. p-Hydroxybenzoic acid 2. p-Hydroxybenzaldehyde 3. Vanillic acid 4. Vanillin |
| Sample: | Commercial vanilla extract in 40% ethanol, filtered |
| Reference: | AOAC Official Method 990.25 |

Acclaim 120 C18

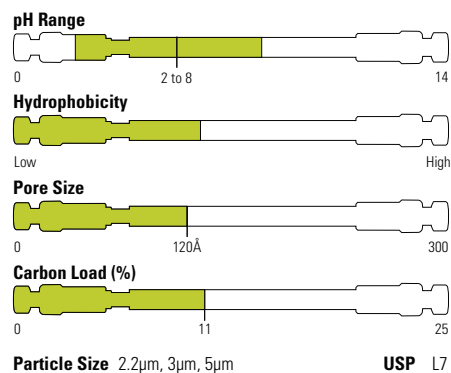
| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID | |
|--------------------|------------------------|-------------|----------|----------|----------|--------|
| 2.2 | RSLC Column | 30 | 071400 | 071606 | - | |
| | | 50 | 068981 | 071605 | - | |
| | | 75 | - | 075697 | - | |
| | | 100 | 068982 | 071604 | - | |
| | | 150 | 071399 | - | - | |
| | | 250 | 074812 | - | - | |
| 3 | HPLC Column | 33 | - | 066272 | - | |
| | | 50 | 059128 | 068971 | 059131 | |
| | | 75 | - | 066273 | - | |
| | | 100 | 059129 | 076186 | 059132 | |
| | | 150 | 059130 | 063691 | 059133 | |
| | | 250 | 076187 | 070077 | - | |
| 5 | Guard Cartridge (2/pk) | 10 | 069689 | 071981 | 069695 | |
| | | HPLC Column | 50 | 059142 | - | 059146 |
| | | | 100 | 059143 | - | 059147 |
| | | | 150 | 059144 | - | 059148 |
| | | | 250 | 059145 | - | 059149 |

Acclaim 120 C8

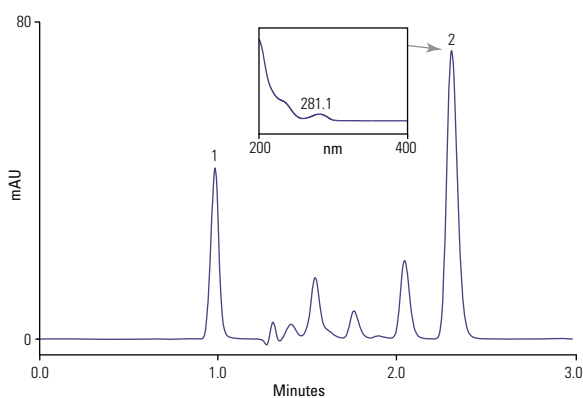
High performance reversed-phase columns with intermediate hydrophobic retention

- Low silanol activity for excellent peak shapes for basic analytes
- Excellent column efficiencies
- LC-MS compatible

Acclaim 120 C8 reversed-phase columns feature densely bonded monolayer C8 ligands on a high-purity, spherical porous silica substrate. The columns are a well-characterized line of LC-MS compatible C8 phases with very high surface coverage and extremely low silanol activity. These columns provide exceptional performance for a variety of applications in the pharmaceutical, environmental, food and many other industrial sectors.



Triclosan in toothpaste



Column: Acclaim RSLC C8, 2.2µm, 50 x 2.1mm

| | |
|-------------------|--|
| Mobile Phase: | Isocratic, 15% buffer, (2mM Ammonium acetate pH5), 85% methanol (v/v) |
| Temperature: | 50°C |
| Flow Rate: | 0.2mL/min |
| Injection Volume: | 1.0µL |
| Detection: | Diode array detector, 281nm, 10Hz, 0.1 s resp. time and spectra 200–400 nm |
| Analytes: | 1. Saccharin 2. Triclosan |
| Sample: | Toothpaste containing 0.3% triclosan |

Acclaim 120 C8

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 2.2 | RSLC Column | 30 | - | 072618 | - |
| | | 50 | 072615 | 072619 | - |
| | | 100 | 072616 | 072620 | - |
| | | 150 | 072617 | - | - |
| | | 250 | 074811 | - | - |
| 3 | HPLC Column | 50 | 059122 | - | 059125 |
| | | 100 | 059123 | - | 059126 |
| | | 150 | 059124 | 068970 | 059127 |
| 5 | Guard Cartridge | 10 | 069688 | 071979 | 069696 |
| | HPLC Column | 50 | 059134 | - | 059138 |
| | | 100 | - | - | 059139 |
| | | 150 | 059136 | - | 059140 |
| | | 250 | - | - | 059141 |

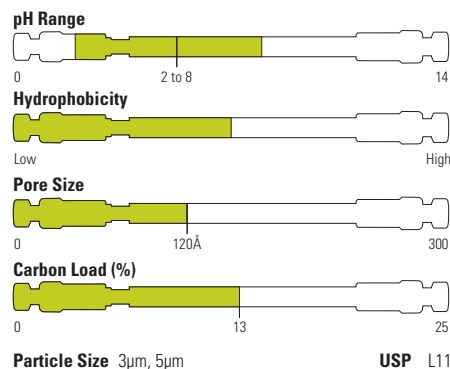
Acclaim Phenyl-1

A unique reversed-phase column with high aromatic selectivity

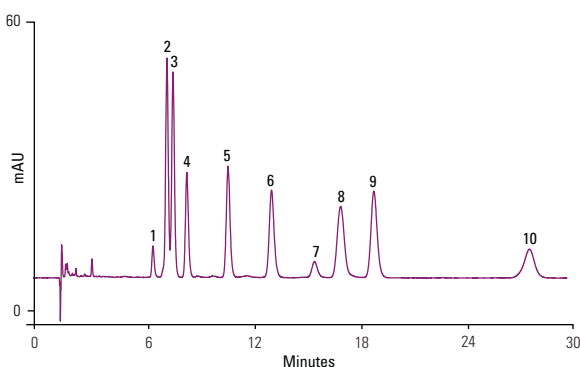
- High aromatic selectivity
- High hydrophobic retention
- Unique and complementary selectivity compared to any other phenyl type column
- Compatibility with highly aqueous mobile phase
- High efficiency and rugged packing

Acclaim Phenyl-1 has a higher pi-pi interaction than other phenyl phases and provides unique selectivity for aromatic compounds while maintaining sufficient hydrophobic interaction and aqueous compatibility for superior chromatographic performance.

The Acclaim Phenyl-1 column can be used in a wide range of applications in pharmaceutical, environmental, food testing and product-quality testing. This column is ideally suited for the analysis of aromatic analytes; some examples include glucocorticosteroids, estrogens, fat-soluble vitamins and phospholipids.



Separation of fat-soluble vitamins



Acclaim Phenyl-1, 3µm, 150 x 3.0mm

| | |
|-------------------|--|
| Mobile Phase: | Methanol/water v/v 90/10 |
| Temperature: | 30°C |
| Flow Rate: | 0.5mL/min |
| Injection Volume: | 2µL |
| Detection: | UV, 220nm |
| Analytes: | (100 ppm each) |
| | 1. Retinol acetate (vitamin A acetate) |
| | 2. Vitamin D2 |
| | 3. Vitamin D3 |
| | 4. delta-Tocopherol |
| | 5. gamma-Tocopherol |
| | 6. alpha-Tocopherol (vitamin E) |
| | 7. Impurity (unknown) |
| | 8. Vitamin E acetate |
| | 9. Vitamin K2 |
| | 10. Vitamin K1 |

Acclaim Phenyl-1

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 3 | Guard Cartridge | 10 | - | 071974 | 071973 |
| | HPLC Column | 150 | 071971 | 071970 | 071969 |
| 5 | HPLC Column | 250 | - | - | 079697 |

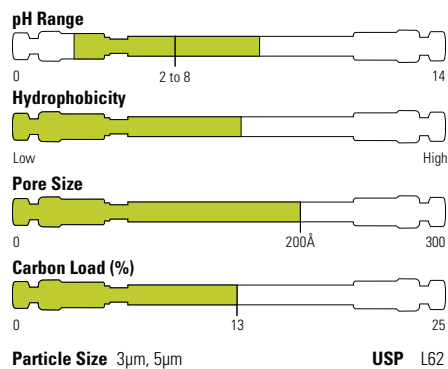
Learn more at [thermofisher.com/acclaim](https://www.thermofisher.com/acclaim)

Acclaim C30

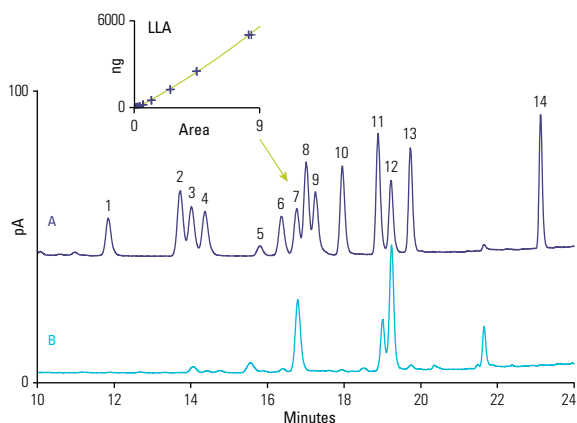
Columns for separating structurally related isomers

- High shape selectivity
- Unique selectivity complementary to other reversed-phase columns
- Compatibility with highly aqueous mobile phase
- High-quality: low column bleed, high efficiency and rugged packing

The Acclaim C30 is designed to provide high shape selectivity for separating hydrophobic structural related isomers and unique selectivity complementary to other reversed-phase columns (e.g. C18).



Omega fatty acids



Acclaim C30, 5µm, 150 x 4.6mm

Mobile Phase A: Water:formic acid:mobile phase B
900:3.6:100 (v/v)

Mobile Phase B: Acetone:acetonitrile:THF:formic acid
675:225:100:4 (v/v)

| Gradient: | Time (min) | %A | %B |
|-----------|------------|-----|----|
| | 0 | 100 | 0 |
| | 1 | 40 | 60 |
| | 13 | 30 | 70 |
| | 22 | 5 | 95 |
| | 24 | 5 | 95 |
| | 29 | 100 | 0 |
| | 32 | 100 | 0 |

Temperature: 30°C

Flow Rate: 1.00mL/min

Injection Volume: 2µL

Detection: Corona ultra, nebulizer 15°C, filter high

Analytes:
1. SDA
2. EPA
3. ALA
4. GLA
5. DHA
6. Arach.
7. LLA

Samples:
A. Standards in isopropanol
B. Saponified chicken fat

Acclaim C30

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| | | | | | |
| 3 | HPLC Column | 50 | 078666 | 078663 | 078661 |
| | | 100 | 078665 | 078662 | 078660 |
| | | 150 | 075725 | 075724 | 075723 |
| | | 250 | 078664 | 075726 | 303056 |
| 5 | Guard Cartridge | 10 | 075722 | 075721 | 075720 |
| | HPLC Column | 150 | - | - | 075719 |
| | | 250 | - | - | 075718 |

Acclaim guard holder

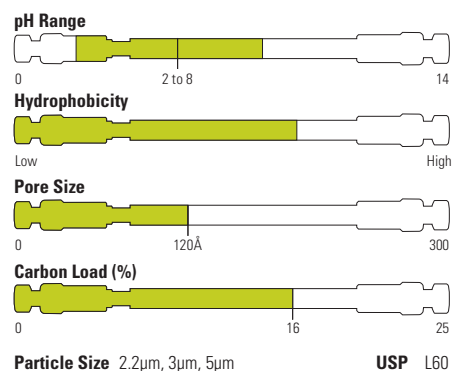
| Format | Cat. No. |
|--|----------|
| Acclaim Guard Cartridge Holder V-2 | 069580 |
| Acclaim Guard Kit (Holder and Coupler) V-2 | 069707 |
| Guard to Analytical Column Coupler V-2 | 074188 |

Acclaim PolarAdvantage

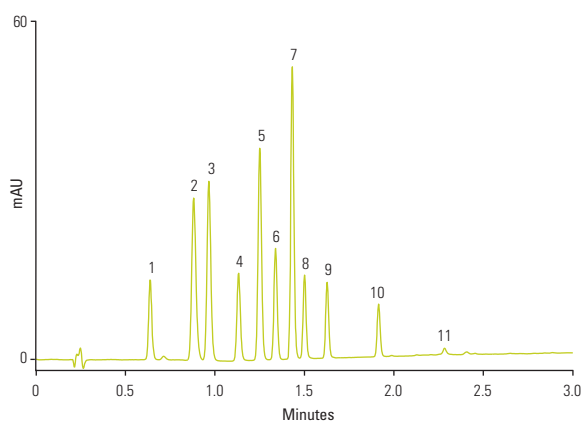
Novel polar-embedded reversed-phase columns with unique selectivity

- Selectivity complementary to the C18 column
- Low silanol activity for excellent peak shape with basic compounds
- Compatible with 100% aqueous mobile phase
- High selectivity for hydrophobic aromatic molecules
- Wide range of applications

Acclaim PolarAdvantage (PA) columns feature a patented bonding column chemistry that incorporates a polar sulfonamide group with an ether linkage near the silica surface. This unique chemistry provides low silanol activity, compatibility with 100% aqueous mobile phase. The Acclaim PA column offers great separation power to resolve a wide variety of polar and non-polar analytes and supports LC-MS analysis.



EPA 604 Phenols



Acclaim RSLC PolarAdvantage, 2.2µm, 50 x 3.0mm

Mobile Phase A: 10mM formic acid + 10mM ammonium formate, pH 3.75 ± 0.05

Mobile Phase B: Acetonitrile

Gradient: -1.5 0.0 0.3 2.6 3.0

%A 70 70 70 10 10

%B 30 30 30 90 90

Temperature: 30°C

Flow Rate: 1.25mL/min

Injection Volume: 0.5µL

Detection: UV, 280nm, 10Hz, 0.5s resp. time

Analytes:

1. Phenol
2. 2,4-Dinitrophenol
3. 4-Nitrophenol
4. 2-Chlorophenol
5. 2-Nitrophenol
6. 2,4-Dimethylphenol
7. 4,6-Dinitro-2-methylphenol
8. 4-Chloro-3-methylphenol
9. 2,4-Dichlorophenol
10. 2,4,6-Trichlorophenol
11. Pentachlorophenol

Sample: Calibration mix, 50µg/mL in water

Acclaim PolarAdvantage

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 2.2 | RSLC Column | 50 | 072622 | - | - |
| | | 100 | 072623 | 072627 | - |
| | | 150 | 072624 | - | - |
| | | 250 | 074813 | - | - |
| 3 | HPLC Column | 50 | 063174 | 068972 | - |
| | | 100 | 061316 | 076214 | - |
| | | 150 | 061317 | 063693 | 061318 |
| | | 250 | - | 070079 | - |
| 5 | Guard Cartridge | 10 | 069691 | 071983 | 069698 |
| | HPLC Column | 50 | - | - | 061319 |
| | | 150 | - | - | 061320 |
| | | 250 | - | - | 061321 |

Learn more at thermofisher.com/acclaim

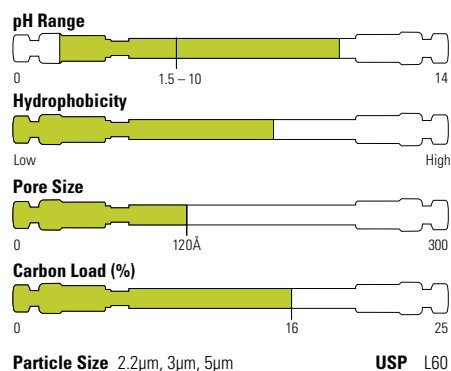
Acclaim PolarAdvantage II

Complementary selectivity and enhanced hydrolytic stability

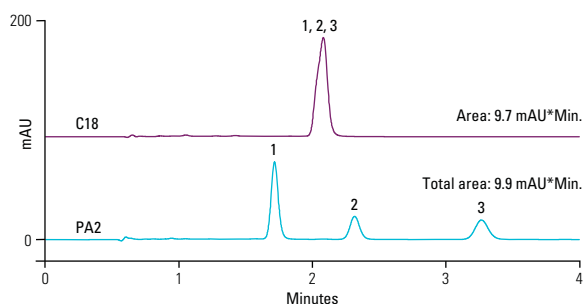
- Unique selectivity complementary to the C18 column
- Novel polar-embedded column chemistry for hydrolytic stability
- Compatible with 100% aqueous mobile phase
- Low bleed for MS compatibility
- Wide range of applications

Acclaim PolarAdvantage II (PA2) columns feature a patented surface chemistry that incorporates an amide-embedded polar group and multi-point attachment between the ligands and the silica surface. This unique chemistry provides enhanced hydrolytic stability from pH 1.5-10 with 100% aqueous mobile phases and exhibits high reversed-phase capacity, with selectivity complementary to conventional C18 columns.

The Acclaim PA2 column is specifically designed to withstand high pH conditions, making it a good choice for the separation of both basic and acidic analytes.



Turmeric



Acclaim RSLC 120 C18 2.2µm, 100 x 2.1mm Acclaim RSLC PA2, 2.2µm, 100 x 2.1mm

| | |
|-----------------|---|
| Mobile Phase A: | 15mM H ₃ PO ₄ |
| Mobile Phase B: | Methanol |
| Isocratic: | C18: 70% B (v/v) PA2: 80% B (v/v) |
| Temperature: | 30°C |
| Flow Rate: | 0.41mL/min |
| Detection: | UV, 428nm |
| Analytes: | 1. Curcumin 2. Demethoxycurcumin 3. Bis-demethoxycurcumin |
| Sample: | Turmeric extract |

Acclaim PolarAdvantage II

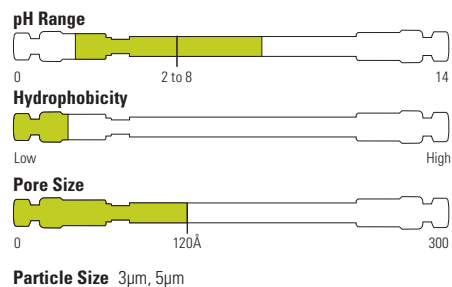
| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 2.2 | RSLC Column | 30 | 071402 | - | - |
| | | 50 | 068989 | 071608 | - |
| | | 100 | 068990 | 071607 | - |
| | | 150 | 071401 | - | - |
| | | 250 | 074814 | - | - |
| 3 | HPLC Column | 33 | - | 066276 | - |
| | | 50 | 077999 | 068973 | 063189 |
| | | 75 | - | 066277 | - |
| | | 100 | 077998 | 078000 | 078001 |
| | | 150 | 063187 | 063705 | 063191 |
| | | 250 | 077997 | 070080 | - |
| 5 | Guard Cartridge | 10 | 069692 | 071985 | 069699 |
| | HPLC Column | 150 | - | - | 063197 |
| | | 250 | - | - | 063199 |

Acclaim HILIC-10

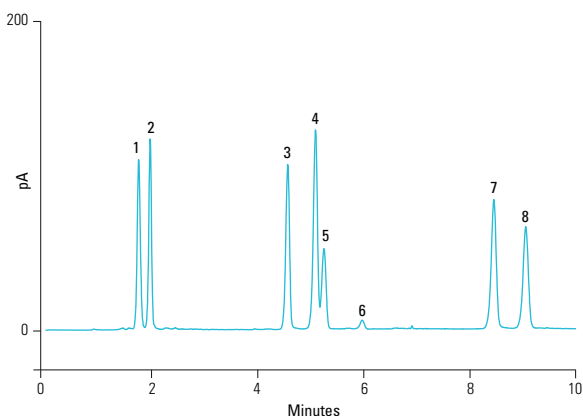
Designed with unique selectivity for hydrophilic molecules

- Retains highly polar molecules that are not retained by reversed-phase chromatography
- Unique selectivity, complementary to reversed-phase columns
- Hydrolytically stable
- Rugged column packing
- Broad application range

The Acclaim HILIC-10 column is designed for separating highly hydrophilic molecules by Hydrophilic Interaction Liquid Chromatography (HILIC). This column is based on high-purity spherical porous silica covalently modified with a proprietary hydrophilic layer.



Glycerides



Acclaim HILIC-10, 3µm, 150 x 3.0mm

| | |
|-------------------|--|
| Mobile Phase A: | Heptane |
| Mobile Phase B: | 2-Propanol/acetic acid 99.5:0.5 |
| Temperature: | 25°C |
| Flow Rate: | 0.50mL/min |
| Injection Volume: | 4µL |
| Detection: | Corona ultra, nebulizer 15°C |
| Analytes: | 1. Tristearin 2. Trilaurin 3. Distearin isomer 1 4. Dilaurin isomer 1 5. Distearin isomer 2 6. Dilaurin isomer 2 7. Monostearin 8. Monolaurin |

Acclaim HILIC-10

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 3 | HPLC Column | 150 | 074259 | 074258 | 074257 |
| 5 | Guard Cartridge | 10 | 074263 | 074261 | 074262 |

Acclaim guard holder

| Format | Cat. No. |
|--|----------|
| Acclaim Guard Cartridge Holder V-2 | 069580 |
| Acclaim Guard Kit (Holder and Coupler) V-2 | 069707 |
| Guard to Analytical Column Coupler V-2 | 074188 |

Learn more at thermofisher.com/acclaim

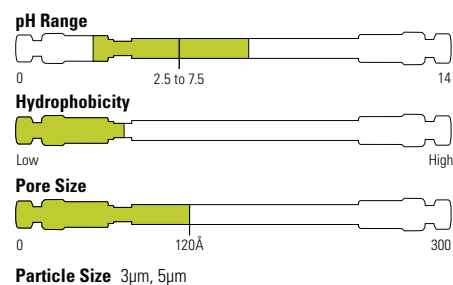
Acclaim Mixed-Mode HILIC-1

Uniquely designed for both reversed-phase and HILIC operations

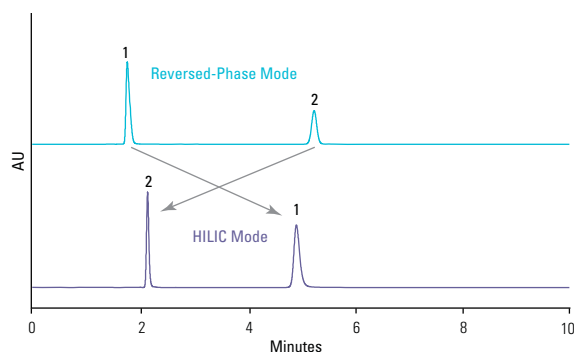
- Can operate in both RP and HILIC modes
- Retains highly polar molecules
- Unique selectivity complementary to RP columns
- Broader application range compared with conventional diol-based columns
- High-efficiency column for high-resolution separations

The Acclaim Mixed-Mode HILIC-1 column features a unique, high-efficiency, silica-based HPLC mixed-mode stationary phase that combines both reversed-phase (RP) and hydrophilic interaction liquid chromatography (HILIC) properties. This combination allows both hydrophobic and hydrophilic interactions to be utilized to optimize separations.

The functional group is of a hydrophobic alkyl chain with a diol group at the terminus. This unique combination results in the adjustable selectivity, making Acclaim Mixed-Mode HILIC-1 separate mixtures that would be impossible for a C18 column. This column is suitable for a broad range of applications, including non-ionic ethoxylated surfactants, drug metabolites, lipids, polyethylene glycols (PEGs), ethoxylated surfactants, and more.



Cytosine and naphthalene



Acclaim Mixed-Mode HILIC-1, 5μm, 150 x 4.6mm

Mobile Phase: CH₃CN/0.1 M NH₄OAc, pH 5.2
v/v 52/48 for RP mode
v/v 92/8 for HILIC mode

Temperature: 30°C

Flow Rate: 1mL/min

Injection Volume: 10μL

Detection: UV, 254nm

Analytes: 1. Cytosine (100 ppm)
2. Naphthalene (100 ppm)

Acclaim Mixed-Mode HILIC-1

| Particle Size (μm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 3 | HPLC Column | 50 | - | 071912 | - |
| | | 150 | 070091 | 070090 | - |
| 5 | Guard Cartridge | 10 | 069694 | 071913 | 069706 |
| | HPLC Column | 150 | 066847 | - | 066843 |
| | | 250 | - | - | 066844 |

Acclaim guard holder

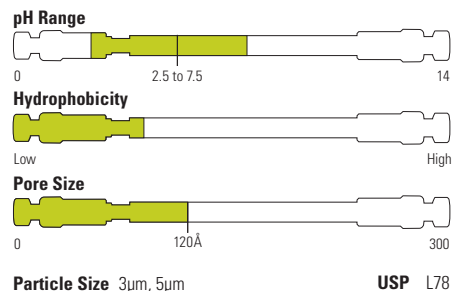
| Format | Cat. No. |
|--|----------|
| Acclaim Guard Cartridge Holder V-2 | 069580 |
| Acclaim Guard Kit (Holder and Coupler) V-2 | 069707 |
| Guard to Analytical Column Coupler V-2 | 074188 |

Acclaim Mixed-Mode WAX-1

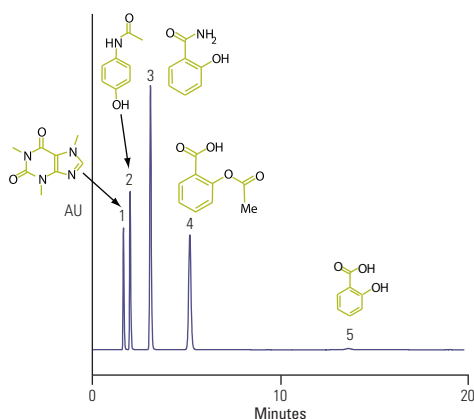
Designed for separating anionic molecules with powerful adjustable selectivity control

- Adjustable selectivity
- Selectivity orthogonal to reversed-phase (RP) columns
- Ideal selectivity for anionic molecules
- Excellent column efficiency and peak asymmetry
- Multimode retention mechanisms: reversed-phase, weak anion exchange, and HILIC modes

The Acclaim Mixed-Mode WAX-1 is a novel, high-efficiency silica HPLC column that combines hydrophobic and weak anion exchange characteristics. Its unique chemistry results in a multimode separation mechanism that includes reversed-phase, anion exchange, and HILIC interactions. Selectivity can be adjusted by changing ionic strength, pH or organic solvent content.



Pain relief medicine



Acclaim Mixed-Mode WAX-1, 5µm, 150 x 4.6mm

| | |
|-------------------|---|
| Mobile Phase: | 40/60 v/v Acetonitrile/buffer (6.8 g potassium monophosphate and 0.5 g pyrophosphate in 1000 g D.I. H ₂ O, pH is adjusted to 6.0 with NaOH) |
| Temperature: | 30°C |
| Flow Rate: | 1mL/min |
| Injection Volume: | 1µL |
| Detection: | UV, 220nm |
| Analytes: | 1. Caffeine 2. Acetaminophen 3. Salicylamide 4. Acetyl salicylic acid (Aspirin) 5. Salicylic acid |

Acclaim Mixed-Mode WAX-1

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 3 | HPLC Column | 50 | - | 071908 | - |
| | | 150 | 070089 | 070088 | - |
| 5 | Guard Cartridge | 10 | 069686 | 071909 | 069704 |
| | HPLC Column | 150 | 067084 | - | 064984 |
| | | 250 | - | - | 064985 |

Acclaim guard holder

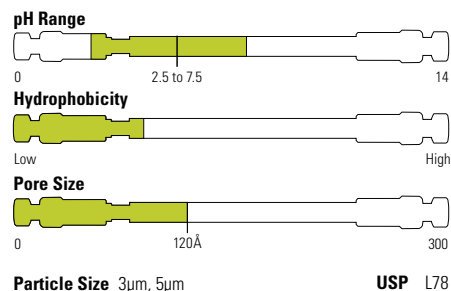
| Format | Cat. No. |
|--|----------|
| Acclaim Guard Cartridge Holder V-2 | 069580 |
| Acclaim Guard Kit (Holder and Coupler) V-2 | 069707 |
| Guard to Analytical Column Coupler V-2 | 074188 |

Acclaim Mixed-Mode WCX-1

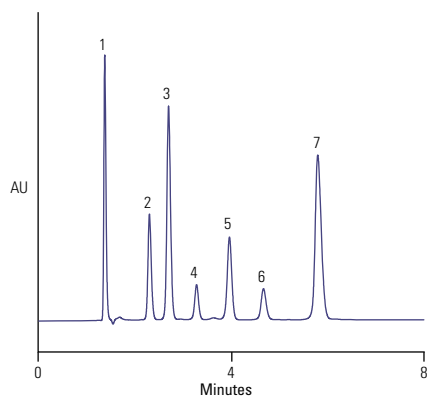
Designed for separating cationic molecules with adjustable selectivity control

- Adjustable selectivity
- Ideal selectivity for separating basic molecules
- Selectivity complementary to C18 RP columns
- Multimode separation mechanism: reversed-phase, weak cation exchange, anion-exclusion and HILIC

The Acclaim Mixed-Mode WCX-1 is a novel, high-efficiency, silica-based column, with a proprietary ligand with both hydrophobic and weak cation exchange properties. Selectivity of ionizable and neutral compounds can be controlled independently or simultaneously by tuning mobile phase ionic strength, pH or organic modifier. This column therefore can separate using multiple separation modes: reversed-phase, cation exchange, and normal-phase/HILIC and is recommended for a variety of industrial applications, including pharmaceutical, chemical, consumer products, foods and beverages.



Pharmaceutical counterions



Acclaim Mixed-Mode WCX-1, 5µm, 150 x 4.6mm

Mobile Phase: 40/60 v/v CH₃CN/NH₄OAc,
pH 5.2 (20 mM total)

Temperature: 30°C

Flow Rate: 1 mL/min

Injection Volume: 5 µL

Detection: UV (225 nm)

Analytes: 1. Maleate 50 µg/mL

2. Ketoprofen 30 µg/mL

3. Naproxen 30 µg/mL

4. Hydrocortisone 60 µg/mL

5. Dexamethasone 60 µg/mL

6. Oxprenolol 300 µg/mL

7. Timolol 250 µg/mL

Acclaim Mixed-Mode WCX-1

| Particle Size (µm) | Format | Length (mm) | 2.1mm ID | 3.0mm ID | 4.6mm ID |
|--------------------|-----------------|-------------|----------|----------|----------|
| 3 | HPLC Column | 50 | - | 071910 | - |
| | | 150 | 070093 | 070092 | - |
| 5 | Guard Cartridge | 10 | 085455 | 071911 | 069705 |
| | HPLC Column | 150 | 068371 | - | 068353 |
| | | 250 | - | - | 068352 |

Acclaim guard holder

| Format | Cat. No. |
|--|----------|
| Acclaim Guard Cartridge Holder V-2 | 069580 |
| Acclaim Guard Kit (Holder and Coupler) V-2 | 069707 |
| Guard to Analytical Column Coupler V-2 | 074188 |

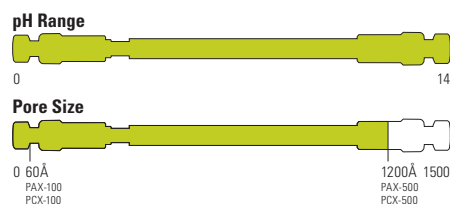
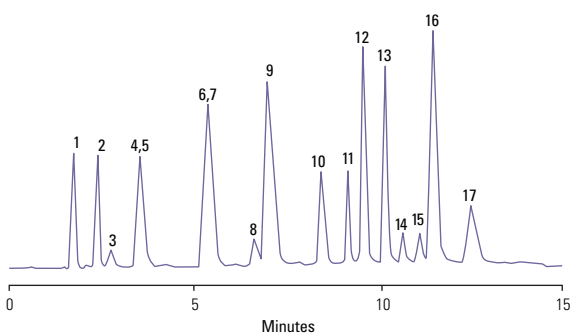
OmniPac

DVB polymer columns for combined ion exchange and reversed-phase separations

- Acid, base and solvent compatible, pH 0 to 14
- Ideal for the separation of high molecular weight organic acids
- Delivers optimal separation of very hydrophobic anions
- Delivers optimal separation of halogenated anions
- Provides simultaneous separation of neutral and ionic species
- Unique selectivity for polar and ionic organic analytes
- Delivers optimal separation of organic, hydrophobic, and halogenated cations

Thermo Scientific™ OmniPac™ is a range of latex-based columns. Both PAX columns have an ion exchange capacity of about 40µeq per column, and the PCX columns have a capacity of approximately 120µeq per column. The PAX-500 and PCX-500 columns separate analytes through both ion exchange and reversed-phase mechanisms, due to their higher reversed-phase capacity relative to the PAX-100 and PCX-100 columns.

Gradient separation of nitrogen-containing compounds



OmniPac PCX-500, 250 x 4.0mm

| | |
|---------------|---|
| Mobile Phase: | Acetonitrile/Sodium Chloride/ Hydrochloric Acid Gradient |
| Flow Rate: | 1.0mL/min |
| Detection: | UV, 254nm |
| Analytes: | <ol style="list-style-type: none"> Orotic Acid 4-Hydroxybenzamide Luminol Impurity Luminol Pyridine PABA 2,2'-Bipyridine p-Phenylenediamine Naphthylamine Nitrobenzoic Acid Tribenzylamine p-Nitroaniline 2,4-Dinitroaniline Dibenzylamine N-Methyl-N-nitrosoaniline 4-Chloro-2-nitroaniline 2,6-Dichloro-4-nitroaniline |

OmniPac anion exchange

| Description | Porosity | Length (mm) | 4.0mm ID |
|-------------|-------------|-------------|----------|
| PAX-100 | Microporous | 50 | 042151 |
| | | 250 | 042150 |
| PAX-500 | Microporous | 50 | 042153 |
| | | 250 | 042152 |

OmniPac cation exchange

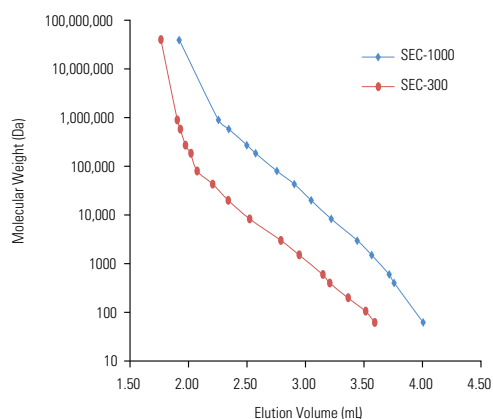
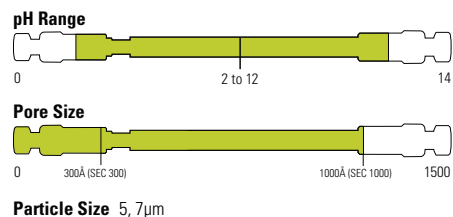
| Description | Porosity | Length (mm) | 4.0mm ID |
|-------------|-------------|-------------|----------|
| PCX-100 | Microporous | 50 | 042193 |
| | | 250 | 042189 |
| PCX-500 | Microporous | 50 | 042195 |
| | | 250 | 042191 |

Acclaim Size Exclusion Chromatography (SEC)

High performance SEC columns for analysis of water soluble polymers

- Proprietary mono-dispersed multi-pore hydrophilic resin: no inflection points in calibration curve
- SEC-300 calibrated from 100 to 50,000 Daltons
- SEC-1000 calibrated from 1,000 to 1,000,000 Daltons
- Availability of small particle sizes packed in 300 x 4.6mm dimension allows for high-resolution analysis at reduced solvent consumption
- Stable surface bonding with low column bleed and compatibility with UV, RI, MS, ELSD and Thermo Scientific™ Dionex™ Corona™ Charged Aerosol Detectors

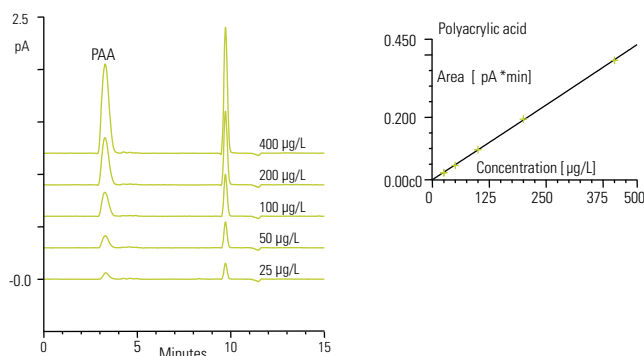
Thermo Scientific™ Acclaim™ SEC-300 and SEC-1000 are a family of resin based, high performance size exclusion chromatography columns specifically designed for the separation of water soluble polymers and oligomers.



Acclaim SEC-300, 5µm, 300 x 4.6mm
Acclaim SEC-1000, 7µm, 300 x 4.6mm

| | |
|-------------------|--|
| Mobile Phase: | 10mM sodium perchlorate |
| Temperature: | 25°C |
| Flow Rate: | 0.35mL/min |
| Injection Volume: | 50µL |
| Detection: | RI |
| Analytes: | (0.03% - 0.1% in mobile phase) dextran (MW 5,000,000-40,000,000), PEO (MW 895,000, 580,000, 272,000, 185,000, 80,000, 43,000, and 20,000), PEG (MW 8,300, 3,000, 1,500, 600, 400 and 200), diethylene glycol (MW 106 and ethylene glycol (MW 62) |

Polyacrylic acid using SEC with charged-aerosol detection



Acclaim SEC-300, 5µm, 300 x 4.6mm

| | |
|-------------------|--|
| Mobile Phase A: | Acetonitrile |
| Mobile Phase B: | Water |
| Temperature: | 30°C |
| Flow Rate: | 0.35mL/min |
| Injection Volume: | 35µL |
| Detection: | Corona III; evaporator 55°C, Engine 40 °C, 2 Hz, filter 5, power function 1.20 |
| Analytes: | 1. PAA standards in water |

Acclaim size exclusion chromatography (SEC)

| Description | Particle Size (µm) | Format | Length (mm) | 4.6mm ID | 7.8mm ID |
|------------------|--------------------|-------------|-------------|----------|----------|
| Acclaim SEC-300 | 5 | Guard | 33 | 082740 | – |
| | | HPLC Column | 150 | – | 079726 |
| | | | 300 | 079723 | 079725 |
| Acclaim SEC-1000 | 7 | Guard | 33 | 082739 | – |
| | | HPLC Column | 150 | – | 079722 |
| | | | 300 | 079724 | 079721 |