

Avantor® Alltima

for general purpose applications

Avantor® Alltima phases are acid and base-deactivated, giving excellent peak shape for acids, bases, and neutrals in a single run. Polymerically bonded and double-endcapped for long column lifetimes, Avantor® Alltima columns are great general purpose "workhorse" columns.

Key Features

- Base deactivated silica
- Stable bonding for long column lifetime
- Symmetrical peak shape

AVANTOR® ALLTIMA PHASE SPECIFICATIONS

Phase	Particle size (µm)	Endcapped	Properties	Applications	USP Code
C18	3, 5, 10	Yes	Classic reversed-phase retention and selectivity	High quality hydrophobic general purpose C18	L1
C18-LL	5	Yes	Lower carbon load than traditional Alltima C18	Reversed-phase applications that require a less hydrophobic C18 phase	L1
C8	3, 5	Yes	Lower retention compared to C18 phases	Reversed-phase applications where C18 is too retentive	L7
Amino	3, 5	No	General purpose amino suitable for normal or reversed-phase use	Use for carbohydrate analysis or as a weak anion exchanger	L8
Cyano	3, 5	Yes	General purpose cyano suitable for normal or reversed-phase use	Rugged normal-phase applications	L10
Phenyl	3, 5	Yes	Less hydrophobic than C18 phase	Selective to aromatic compounds	L11
Silica	3, 5, 10	-	Highly polar phase	General purpose normal phase applications	L3

ORDERING INFORMATION

ANALYTICAL COLUMNS - 3 µm

Length (mm)	20			50		100		
i.d. (mm)	2.1	4.6		2.1	4.6	1.0	2.1	4.6
C18	43803	43851		88353	81412	43853	88352	81382
C8	-	-	-	-	81413	-	-	81392
Amino	-	-	-	-	81180	-	-	81183
Cyano	-	-	-	-	81179	-	-	81182
Phenyl	-	-	-	-	81178	-	-	81181
Silica	-	-	-	-	81414	-	-	81404

Length (mm)	150			250	Guard cartridges (3/pk) ¹
i.d. (mm)	2.1	3.0	4.6	4.6	For 2.1
C18	43852	81143	81387	AL-3C18-250D	96681/N
C8	-	-	81397	-	-
Amino	AL-3NH-150DK ²	-	81190	-	-
Cyano	-	-	81189	-	-
Phenyl	43813	-	81188	-	-
Silica	43884	-	81409	-	-

¹ To be used with All-Guard cartridge holder (80101/N) and column coupler for All-Guard cartridges (H1-081).

² Actual dimensions: 150 x 2.0 mm

COLUMNS COMPATIBLE WITH WATERS INSTRUMENTS - 3 µm

Length (mm)	100	150
i.d. (mm)	4.6	4.6
C18	81383	81388
C8	81393	81398
Silica	81405	81410

ROCKET COLUMNS - 3 µm

Length (mm)	33	53
i.d. (mm)	7	7
C18	50603	50605
C8	-	50609
Phenyl	-	43867
Silica	-	43877

Rocket columns are specifically designed for high-throughput and high-speed methods.

CONDITIONS

Column: Avantor® Alltima C8, 5 µm, 150 x 4.6 mm (p/n 88072)
Mobile phase: A: 0.05 M K₂HPO₄, pH 3.3
 B: Methanol
 C: Acetonitrile
Gradient: Time / min 0 2 5
 % A 80 80 45
 % B 10 10 30
 % C 10 10 25
Flow rate: 2.0 ml min⁻¹
Detector: UV at 280 nm

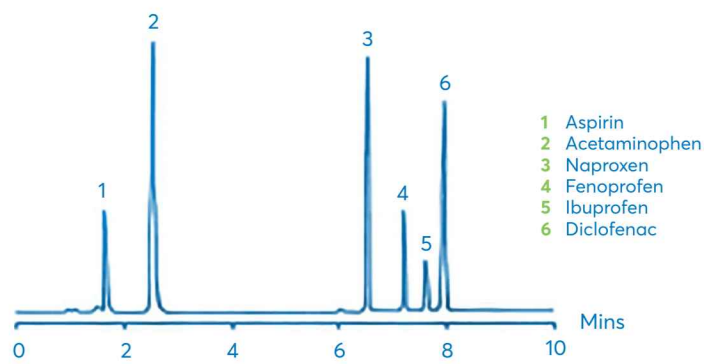


FIGURE 1: Analgesics.

ANALYTICAL COLUMNS - 5 µm

Length (mm)	50		100		125	150		
i.d. (mm)	2.1	4.6	3.0	4.6	4.0	2.1	3.0	4.6
C18	88888	88889	–	88059	AL-5C18-125DF	88370	81140	88052 ¹
C18-LL	–	–	–	–	–	88388	–	88069
C8	–	–	AL-5C8-100DT	–	–	88372	81146	88072
Amino	–	–	–	–	–	–	–	88205
Cyano	–	–	–	88065	–	–	–	88180
Phenyl	–	–	–	–	–	–	81147	88087
Silica	–	–	–	–	–	–	–	88123

¹ Also available in PEEK metal-free hardware (88051).

Length (mm)	250				300			Guard cartridges (3/pk) ¹	
i.d. (mm)	2.1	3.0	4.0	4.6	3.9	4.0	4.6	For 2.1	For 3.0–4.6
C18	88371	81142	AL-5C18-250DF	88056 ²	AL-5C18-300DE	AL-5C18-300DF	AL-5C18-300D	96680/N ³	96080/N ⁴
C18-LL	88389	–	–	88099	–	–	–	96432/N	96285/N
C8	–	–	–	88076	–	–	–	96441/N	96081/N
Amino	–	–	AL-5NH-250DF	88217 ⁵	–	–	–	–	96085/N
Cyano	–	–	–	88189	–	–	–	–	96084/N
Phenyl	–	–	–	88092	AL-5PH-300DE	–	–	96442/N	96082/N
Silica	–	–	AL-5-250DF	88171	–	AL-5-300DF	–	96450/N	96083/N

¹ To be used with All-Guard cartridge holder (80101/N) and column coupler for All-Guard cartridges (HI-081).

² Also available in PEEK metal-free hardware (88055).

³ Also available with 10/pk (5174010/N).

⁴ Also available with 10/pk (96080SP/N).

⁵ Also available with reversed-phase solvent (88217RP).

COLUMNS COMPATIBLE WITH WATERS INSTRUMENTS - 5 µm

Length (mm)	150	250	Guard cartridges (3/pk) ¹
i.d. (mm)	4.6	4.6	
C18	88053	88057	96361/N
C8	88073	88077	96362/N
Amino	–	88218	96085/N
Cyano	88182	88191	96084/N
Phenyl	88088	88093	96082/N
Silica	–	88172	96083/N

¹ To be used with All-Guard cartridge holder (80101/N) and column coupler for All-Guard cartridges (Waters type column port: HI-881).

METHOD VALIDATION KITS

Alltima C18 method validation kits containing 3 columns from 3 different silica batches are available for you to evaluate the robustness of your method to ensure reproducibility run after run. Please contact us for further information.

SEMI-PREPARATIVE AND PREPARATIVE COLUMNS - 5 µm

Length (mm)	150		250		Guard cartridges (3/pk) ¹
i.d. (mm)	10	22	10	22	For 10-22
C18	81102	81106	88063	81105	AL-5C18-10CP2
C8	81109	–	88081	81110	–
Silica	81117	–	81116	81118	–

¹ To be used with semi-prep guard holder (C-1000) and column coupler for All-Guard cartridges (HI-081).

SEMI-PREPARATIVE AND PREPARATIVE COLUMNS - 10 µm

Length (mm)	250		Guard column (mm)
i.d. (mm)	10	22	33 x 7
C18	88334	88335	970203
Silica	88338	88339	970204

CONDITIONS

Column: Avantor® Alltima C18, 3 µm, 53 x 7 mm Rocket (p/n: 50605)
Mobile phase: A: 0.1 % Trifluoroacetic Acid in 0.025 M Ammonium Acetate
 B: 0.1 % Trifluoroacetic Acid in Acetonitrile
Gradient:
 Time / min 0 4
 % A 80 5
 % B 20 95
Flow rate: 3.5 ml/min
Detector: UV at 254 nm

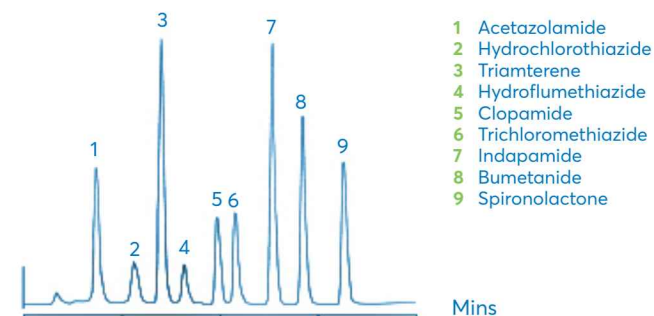


FIGURE 2: Diuretics – High Throughput.