

Vydac

for biomolecules and polypeptide separation

Vydac 300 Å columns are a commonly employed range in bioseparations. Vydac columns are fully scalable from capillary to microbore and analytical to preparative dimensions. Separate biomolecules from small peptides to large intact proteins with the Vydac family of reversed-phase columns (including Vydac TP, MS, Denali, and Everest) and ion exchange (Vydac 302IC) columns. Reversed-phase columns for a polypeptide separation should be considered on the basis of the polypeptide's hydrophobicity, with molecular weight as a secondary consideration.



VYDAC HPLC COLUMN SPECIFICATIONS

Phase	USP listing	Functional group	Endcapped	Particle Size (µm)	Surface Area (m ² /g)	Pore size (Å)	Carbon load (%)	Bonding type	pH
Vydac TP									
218TP	L1	Octadecyl	Yes	3, 5, 10, 10-15, 15-20, 20-30	60 - 110	300	8	Polymeric	2 - 7
238TP	L1	Octadecyl	No	5	60 - 110	300	4	Monomeric	2 - 7
201TP	L1	Octadecyl	No	5, 10	70 - 90	300	8	Polymeric	2 - 7
202TP	L1	Octadecyl	No	5	60 - 90	300	9	Polymeric	2 - 7
208TP	L7	Octyl	Yes	3, 5, 10, 10-15, 15-20	60 - 110	300	5	Polymeric	2 - 7
214TP	L26	Butyl	Yes	3, 5, 10, 10-15, 15-20	60 - 110	300	3	Polymeric	2 - 7
214ATP	L26	Butyl	Yes	5	60 - 110	300	3	Polymeric	2 - 7
219TP	L11	Diphenyl	Yes	5, 10	60 - 110	300	4	Polymeric	2 - 7
Vydac MS									
218MS	L1	Octadecyl	Yes	5, 10	200	190	12	Monomeric	2 - 7
238MS	L1	Octadecyl	Yes	5	200	190	4	Monomeric	2 - 7
208MS	L1	Octadecyl	Yes	5, 10	450	100	24	Monomeric	2 - 7
214MS	L1	Octadecyl	Yes	5, 10, 10-15	450	100	20	Monomeric	2 - 7
Vydac Denali									
238DE	L1	Octadecyl	Yes	5, 10	70 - 110	120	6	Monomeric	2 - 7
Vydac Everest									
238EV	L1	Octadecyl	Yes	5	70 - 110	300	6	Monomeric	2 - 7
Vydac IC									
302IC	-	Quaternary amine	-	10	-	> 100	-	-	2 - 6.5

Please contact chromsupport@avantorsciences.com for advice on column selection for EP (European Pharmacopoeia) and JP (Japanese Pharmacopoeia) guidelines, or by application.

Vydac Everest

for high resolution of complex samples

Vydac Everest columns (238EV) have unique selectivity and sensitivity, which are the result of bonding technology that improves C18 surface coverage and deactivates residual silanols. Leading 300 Å C18 chemistries have had carbon coverage in the 2.8 to 3.6 $\mu\text{mol m}^{-2}$ range. Everest C18 coverage is in excess of 4 $\mu\text{mol m}^{-2}$ and approximates the theoretical limit based on surface area. The increased shielding of the base silica increases column lifetime and reduces the amount of TFA required to

shield the silica.

Key Features

- Unique selectivity for hydrophilic and hydrophobic peptides
- 300 Å pore size spherical silica
- Excellent sensitivity with little or no TFA in mobile phase
- Ideal for complex enzymatic digests (>12 proteins)

ORDERING INFORMATION

CAPILLARY COLUMNS - 5 μm

Length (mm)	50			100	
i.d. (mm)	0.075	0.3	0.5	0.075	0.3
C18	238EV5.07505	238EV5.305	238EV5.505	238EV5.07510	238EV5.310

Length (mm)	150			250
i.d. (mm)	0.075	0.3	0.5	0.3
C18	238EV5.07515	238EV5.315	238EV5.515	238EV5.325

ANALYTICAL COLUMNS - 5 μm

Length (mm)	50		100		150		
i.d. (mm)	1.0	4.6	2.1	3.0	1.0	2.1	4.6
C18	238EV5105	238EV5405	238EV5210	238EV5310	238EV5115	238EV5215	238EV5415

Length (mm)	250			Guard cartridges (2/pk) ¹		Guard cartridge kits ²
i.d. (mm)	1.0	2.1	4.6	For 2.1	For 3.0-4.6	For 3.0-4.6
C18	238EV51	238EV52	238EV54	238GD52EV/N	238GD54EV/N	238GK54EV/N

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

² Includes holder (80101/N), column coupler (HI-081), and 1 guard cartridge.

SEMI-PREPARATIVE COLUMNS - 5 μm

Length (mm)	250	Guard cartridges (2/pk) ¹
i.d. (mm)	10	For 10-22
C18	238EV510	238GCC510EV

¹ To be used with semi-prep guard holder (GCH10) and column coupler for All-Guard cartridges (HI-081).

SEMI-PREPARATIVE COLUMNS - 10 μm

Length (mm)	250
i.d. (mm)	22
C18	238EV1022