

Vydac 300 Å columns are a commonly employed range in bioseparations. Following the acquisition of Grace HPLC ranges by Hichrom, Vydac columns continue to be available exclusively from Hichrom in 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 TP

Vydac TP reversed-phase material consists of aliphatic groups bonded to the surface of 300 Å pore diameter silica. The large pores of the TP silica give polypeptide molecules complete access to the interior of the silica pores. Vydac TP silica is the standard that has defined large pore HPLC for polypeptide separations for nearly two decades.

### Key Features

- Long column lifetime and negligible phase leaching
- Reliable protein purifications, scalable from analytical to preparative scale
- Referenced in a large number of patents and publications

### Vydac TP Phase Specifications

Phase	Functional group	Particle size / μm	Properties	Applications	USP code
218TP	C18	3, 5, 10	First generation polymeric C18 phase with unique selectivity	Small polypeptides 4-5 kDa MW, enzymatic digest fragments, natural and synthetic peptides, multi-ring compounds	L1
238TP	C18	5	First generation monomeric C18 phase	Use for same applications as 218TP, but offers different C18 selectivity	L1
201TP	C18	5, 10	Non-endcapped C18 phase	Developed for separation of PAHs	L1
202TP	C18	5	Higher carbon load than 201TP	Developed for separation of PAHs	L1
208TP	C8	3, 5, 10	Less hydrophobic than C18TP phase	Polypeptides 10-20 kDa MW	L7
214TP	C4	5, 10	First generation C4 phase	Glycoproteins, haemoglobin variants, histones, insulin variants, membrane proteins	L26
214ATP	C4	5	C4 phase with lower level of endcapping	Optimised for analysis of human growth hormone	L26
219TP	Diphenyl	5, 10	Lowest capacity first generation diphenyl phase	Polypeptides with aromatic side chains, large hydrophobic proteins, membrane-spanning peptides, lipid peptides, fusion proteins from inclusion bodies	L11

## Ordering Information

### Capillary Columns

#### 5 μm

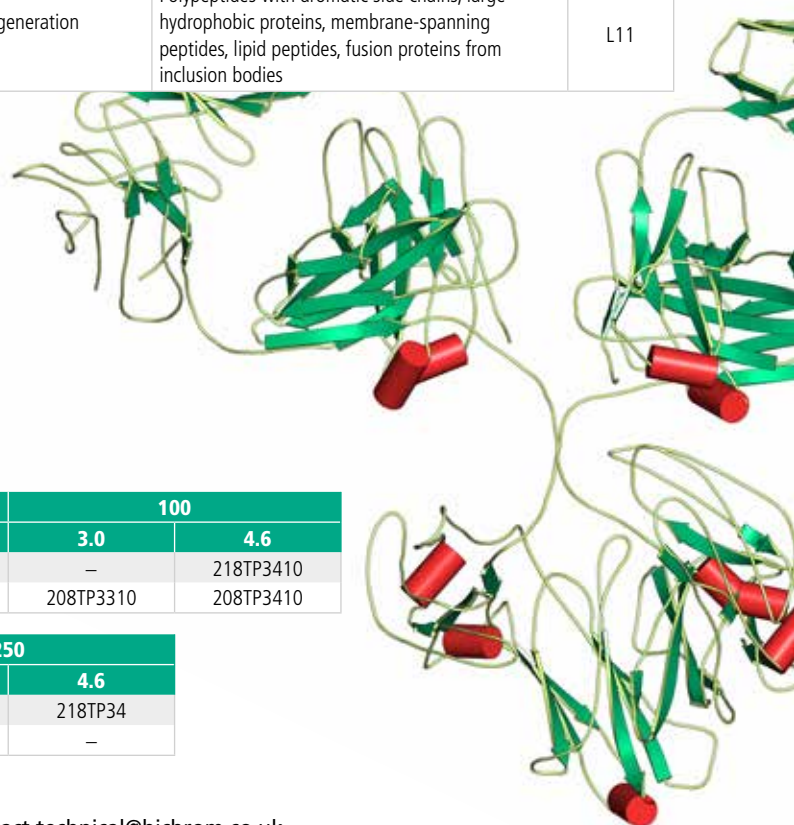
Length / mm	150	
i.d. / mm	0.3	0.5
218TP	218TP5.315	—
214TP	214TP5.315	214TP5.515

### Analytical Columns

#### 3 μm

Length / mm	50			100	
i.d. / mm	2.1	3.0	4.6	3.0	4.6
218TP	218TP3205	218TP3305	218TP3405	—	218TP3410
208TP	—	—	208TP3405	208TP3310	208TP3410

Length / mm	150		250	
i.d. / mm	2.1	4.6	3.0	4.6
218TP	218TP3215	218TP3415	—	218TP34
208TP	—	—	208TP33	—



Length / mm	Guard cartridges (2/pk) <sup>1</sup>		Guard cartridge kits <sup>2</sup>	
i.d. / mm	For 2.1	For 3.0–4.6	For 2.1	For 3.0–4.6
218TP	218GD32/N	218GD34/N	218GK32/N	218GK34/N
208TP	–	208GD34/N	–	208GK34/N

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

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

### 5 µm

Length / mm	30		50		
i.d. / mm	2.1	1.0	2.1	3.0	4.6
218TP	–	218TP5105	218TP5205	218TP5305	218TP5405
238TP	–	238TP5105	238TP5205	–	238TP5405
201TP	201TP5203	201TP5105	201TP5205	–	201TP5405
208TP	–	208TP5105	208TP5205	–	208TP5405
214TP	–	214TP5105	214TP5205	214TP5305	214TP5405
214ATP	–	–	–	–	214ATP5405
219TP	–	219TP5105	219TP5205	–	219TP5405

Length / mm	100			
i.d. / mm	1.0	2.1	3.0	4.6
218TP	218TP5110	218TP5210	–	218TP5410
238TP	238TP5110	–	–	238TP5410
201TP	–	201TP5210	201TP5310	201TP5410
208TP	208TP5110	208TP5210	–	208TP5410
214TP	214TP5110	214TP5210	214TP5310	214TP5410
214ATP	–	214ATP5210	–	–
219TP	–	219TP5210	–	219TP5410

Length / mm	150			
i.d. / mm	1.0	2.1	3.0	4.6
218TP	218TP5115	218TP5215	–	218TP5415
238TP	238TP5115	238TP5215	238TP5315	238TP5415
201TP	201TP5115	201TP5215	201TP5315	201TP5415
202TP	–	–	–	202TP5415
208TP	208TP5115	208TP5215	208TP5315	208TP5415
214TP	214TP5115	214TP5215	214TP5315	214TP5415
214ATP	–	214ATP5215	–	214ATP5415
219TP	219TP5115	219TP5215	219TP5315	219TP5415

Length / mm	250				
i.d. / mm	1.0	2.1	3.0	4.0	4.6
218TP	218TP51	218TP52	218TP53	–	218TP54
238TP	238TP51	238TP52	238TP53	–	238TP54
201TP	201TP51	201TP52	–	201TP540	201TP54
202TP	–	–	–	–	202TP54
208TP	208TP51	208TP52	208TP53	–	208TP54
214TP	214TP51	214TP52	214TP53	–	214TP54
214ATP	–	214ATP52	–	–	214ATP54
219TP	219TP51	219TP52	219TP53	–	219TP54

Length / mm	Guard cartridges (2/pk) <sup>1</sup>			Guard cartridge kits <sup>2</sup>		
i.d. / mm	For 1.0	For 2.1	For 3.0-4.6	For 1.0	For 2.1	For 3.0–4.6
218TP	218GD51/N	218GD52/N	218GD54/N	218GK51/N	218GK52/N	218GK54/N
238TP	238GD51/N	238GD52/N	238GD54/N	238GK51/N	238GK52/N	238GK54/N
201TP	–	201GD52/N	201GD54/N	–	201GK52/N	201GK54/N
202TP	–	–	202GD54/N	–	–	202GK54/N
208TP	208GD51/N	208GD52/N	208GD54/N	208GK51/N	208GK52/N	208GK54/N
214TP	214GD51/N	214GD52/N	214GD54/N	214GK51/N	214GK52/N	214GK54/N
214ATP	–	–	214AGD54/N	–	–	214AGK54/N
219TP	–	219GD52/N	219GD54/N	–	219GK52/N	219GK54/N

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

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

### 10 µm

Length / mm	50	150	250			Guard cartridges (2/pk) <sup>1</sup>	Guard cartridge kits <sup>2</sup>
i.d. / mm	4.6	4.6	1.0	2.1	4.6	For 3.0-4.6	For 3.0-4.6
218TP	–	218TP10415	218TP101	218TP102	218TP104	218GD104/N	218GK104/N
201TP	–	201TP10415	–	–	201TP104	201GD104/N	201GK104/N
208TP	208TP10405	208TP10415	–	–	208TP104	208GD104/N	208GK104/N
214TP	–	214TP10415	214TP101	–	214TP104	214GD104/N	214GK104/N

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

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



## Vydac TP continued

### 10–15 µm

Length / mm	150	250
i.d. / mm	4.6	4.6
218TP	5119751	218TP10154
214TP	–	214TP10154
214TP	–	214TP101015

### 15–20 µm

Length / mm	50	100	150	250	Guard cartridges (2/pk) <sup>1</sup>	Guard cartridge kits <sup>2</sup>
i.d. / mm	4.6	4.6	4.6	4.6	For 3.0–4.6	For 3.0–4.6
218TP	218TP1520405	218TP1520410	218TP1520415	–	–	–
208TP	–	208TP1520410	–	–	–	–
214TP	–	–	–	214TP15204	214GD15204/N	214GK15204/N

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

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

### 20–30 µm

Length / mm	150
i.d. / mm	4.6
218TP	218TP2030415

## Semi-preparative and Preparative Columns

### 5 µm

Length / mm	100		150	250	Guard cartridges (2/pk) <sup>1</sup>	Guard cartridge kits <sup>2</sup>
i.d. / mm	10	22	10	10	For 10–22	For 10–22
218TP	218TP51010	–	218TP51015	218TP510	218GCC510	218FSK510
238TP	–	–	–	238TP510	–	–
201TP	–	–	–	201TP510	–	–
208TP	208TP51010	–	–	208TP510	208GCC510	208FSK510
214TP	214TP51010	214TP52210	214TP51015	214TP510	214GCC510	214FSK510
214ATP	–	–	–	214ATP510	–	–
219TP	–	–	–	219TP510	219GCC510	219FSK510

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

<sup>2</sup>Includes holder (GCH10), column coupler (HI-081), and 1 guard cartridge.

### 10 µm

Length / mm	100	150		250		Guard cartridges (2/pk) <sup>1</sup>
i.d. / mm	22	10	22	10	22	For 10–22
218TP	218TP102210	218TP101015	218TP102215	218TP1010	218TP1022	218GCC1010
208TP	–	–	–	208TP1010	208TP1022	208GCC1010
214TP	–	214TP101015	214TP102215	214TP1010	214TP1022	214GCC1010
219TP	–	–	–	219TP1010	219TP1022	219GCC1010

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

### 10–15 µm

Length / mm	150		250		Guard cartridges – 12 µm (2/pk) <sup>1</sup>	Guard cartridge kits – 12 µm <sup>2</sup>
i.d. / mm	10	22	10	22	For 10–22	For 10–22
218TP	–	–	218TP101510	218TP101522	218GCC1210	218FSK1210
208TP	–	–	208TP101510	208TP101522	208GCC1210	208FSK1210
214TP	214TP10151015	214TP10152215	214TP101510	214TP101522	214GCC1210	214FSK1210

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

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

### 15–20 µm

Length / mm	100	150	250		Guard cartridges (2/pk) <sup>1</sup>
i.d. / mm	22	22	10	22	For 10–22
218TP	218TP15202210	218TP15202215	218TP152010	218TP152022	–
208TP	–	–	–	–	–
214TP	–	–	214TP152010	214TP152022	214GCC152010

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