

HPLC for Small Molecules

Discovery®: Discovery® HS F5

Discovery® HS F5

Discovery® HS F5 HPLC Column

The Discovery® HS F5 bonded phase provides reversed-phase separations that are distinctly different from C18 columns. However, compounds will generally elute within the same retention time window, making most C18 methods easily transferable.

Guidelines for transferring a C18 method to Discovery® HS F5:

Generally, bases are retained longer on the HS F5 than on a C18. Increasing the organic content of a C18 separation 5 to 10 percent will generally provide similar retention on an HS F5. Results with other compounds are highly variable. However, it is generally true that solutes with log $P_{o/w}$ values less than 2.5 will be retained longer on HS F5 compared to a C18. The degree of difference is highly solute dependent.

Features and Benefits

- Unique selectivity
- Similar retention to C18 (sometimes requires stronger mobile phase)
- Excellent peak shape
- Stable, low-bleed LC-MS separations
- Scalable separations from 3 to 10µm particle sizes

suitable for L43 per USP

loading	12% Carbon
particle platform	silica gel, high purity, spherical
phase	pentafluorophenylpropyl
surface coverage	4 µmol/m ²
metals	<10 ppm
surface area	300 m ² /g
endcapped	Yes
pore size	120 Å
operating pH range	2 - 8
temp. range	≤70 °C

I.D. (mm)	L (cm)	Cat. No.	Qty
particle size 3 µm			
2.1	3.3	567501-U	1 ea
2.1	5	567500-U	1 ea
2.1	10	567502-U	1 ea
2.1	15	567503-U	1 ea
3.0	3.3	567505-U	1 ea
3.0	10	567581-U	1 ea
3.0	15	567542-U	1 ea
4	5	567530-U	1 ea
4	10	567531-U	1 ea
4	15	567532-U	1 ea
4.6	3.3	567509-U	1 ea
4.6	5	567504-U	1 ea
4.6	10	567506-U	1 ea
4.6	15	567507-U	1 ea
particle size 5 µm			
2.1	5	567508-U	1 ea
2.1	10	567510-U	1 ea
2.1	15	567511-U	1 ea
2.1	25	567512-U	1 ea
3.0	15	567541-U	1 ea
4	5	567533-U	1 ea
4	10	567534-U	1 ea
4	15	567535-U	1 ea
4	25	567536-U	1 ea
4.6	5	567513-U	1 ea
4.6	10	567515-U	1 ea
4.6	15	567516-U	1 ea
4.6	25	567517-U	1 ea
10	5	567518-U	1 ea
10	10	567537-U	1 ea
10	15	567519-U	1 ea
10	25	567520-U	1 ea

I.D. (mm)	L (cm)	Cat. No.	Qty
21.2	15	567522-U	1 ea
21.2	25	567523-U	1 ea
particle size 10 µm			
21.2	15	567528-U	1 ea
21.2	25	567529-U	1 ea

Discovery® HS F5 Supelguard™ Cartridge

I.D. (mm)	L (cm)	Cat. No.	Qty
particle size 3 µm			
2.1	2	567570-U	2 ea
2.1	2	567571-U	1 kit
4.0	2	567572-U	2 ea
4.0	2	567573-U	1 kit
particle size 5 µm			
2.1	2	567574-U	2 ea
2.1	2	567575-U	1 kit
4.0	2	567576-U	2 ea
4.0	2	567577-U	1 kit
10	1	567578-U	1 ea

Kit includes one cartridge, a stand-alone holder, a piece of tubing, 2 nuts and ferrules.

Discovery® HS C18

Discovery® HS C18 HPLC Column

Features and Benefits

- Stable, low bleed for LC-MS applications
- Scalable from analytical to preparatory
- Highly stable to ensure excellent run-to-run and lot-to-lot reproducibility
- Higher hydrophobicity for better resolution of difficult analytes

suitable for L1 per USP

loading	20% Carbon
particle platform	silica gel, high purity, spherical
phase	octadecyl
surface coverage	3.2 µmol/m ²
metals	<10 ppm
surface area	300 m ² /g
endcapped	Yes
pore size	120 Å
operating pH range	2 - 8
temp. range	≤70 °C

I.D. (mm)	L (cm)	Cat. No.	Qty
particle size 3 µm			
2.1	5	569253-U	1 ea
2.1	7.5	569254-U	1 ea
2.1	15	569255-U	1 ea
4.6	5	569250-U	1 ea
4.6	7.5	569251-U	1 ea
4.6	15	569252-U	1 ea
particle size 5 µm			
2.1	5	568500-U	1 ea
2.1	10	568501-U	1 ea
2.1	15	568502-U	1 ea
2.1	25	568503-U	1 ea
4	5	568510-U	1 ea
4	15	568512-U	1 ea
4	25	568513-U	1 ea
4.6	5	568520-U	1 ea
4.6	10	568521-U	1 ea
4.6	15	568522-U	1 ea
4.6	25	568523-U	1 ea
10	5	568530-U	1 ea
10	10	568531-U	1 ea