

Avantor® Genesis

for analysis of a wide range of analytes

Avantor® Genesis phases are based on high purity, metal-free, spherical silica. They are suitable for the analysis of a wide range of compounds. Offering a more unique 4 µm particle size.

Key Features

- Good peak shape and reproducibility
- Long column lifetime
- pH stability 1 to 10

AVANTOR® GENESIS PHASE SPECIFICATIONS

Phase	Particle size (µm)	Endcapped	Properties	USP Code
C18	3, 4, 5	Yes	Excellent peak symmetry, reduced need for mobile phase modifiers, long column life	L1
C8	4, 5	No	Suitable for lower pH separations	L7
C8(EC)	4	Yes	Excellent peak symmetry, reduced need for mobile phase modifiers, long column life	L7
AQ	4	Yes	Designed for separating hydrophilic and polar compounds, stable retention times in 100 % aqueous mobile phases, rapid equilibration, unique reversed-phase selectivity	L1
Phenyl	4, 5	Yes	Reversed-phase chemistry, improves the chromatography of polar aromatics, fatty acids, and basic pharmaceuticals	L11
Cyano	4	Yes	Suitable for polar analysis, analytes with double- and/or triple-bonds, and compounds that have too much retention on alkyl phases	L10
Silica	4	–	Highly polar phase for general purpose applications	L3

ORDERING INFORMATION

ANALYTICAL COLUMNS - 3 µm

Length (mm)	50		100		150		250	
i.d. (mm)	3.0	4.6	4.0	4.6	2.1	4.6	3.0	4.6
C18	FL5963E	FM5963E	FH10963E	FM10963E	FK15963E	FM15963E	FL25963E	FM25963E

ANALYTICAL COLUMNS - 4 µm

Length (mm)	30		50			100			125	
i.d. (mm)	2.1	3.0	2.1	3.0	4.6	2.1	3.0	4.6	4.0	4.6
C18	FK3960E	–	FK5960E	FL5960E	FM5960E	FK10960E	FL10960E	FM10960E	GEN-4C18-125DF	GEN-4C18-125D
C8	–	FL3962E	FK5962E	–	–	–	FL10962E	FM10962E	–	–
C8(EC)	–	–	FK5964E	–	FM5964	–	–	FM10964E	–	–
AQ	–	–	–	–	FM5951E	–	–	FM10951E	–	–
Cyano	–	–	–	–	–	–	–	FM10965E ¹	–	–

¹ Also available in PEEK, metal-free column hardware (FM10965EP).

Length (mm)	150		250			Guard cartridges (3/pk) ¹
i.d. (mm)	4.0	4.6	3.0	4.0	4.6	For 3.0-4.6
C18	FH15960E	FM15960E	FL25960E	FH25960E	FM25960E	FH1960-2/N
C8	–	FM15962E	–	–	FM25962E	FH1962-2/N
C8(EC)	–	FM15964E	–	FH25964E	FM25964E	–
AQ	–	FM15951E	–	–	FM25951E	FH1951-2/N
Cyano	–	FM15965E ²	–	–	FM25965E	–
Phenyl	–	FM15980E	–	–	FM25980E	–
Silica	–	–	–	–	FM25961E	FH1961-2/N

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

² Also available with reversed-phase shipping solvent (FM15965ER).

ANALYTICAL COLUMNS - 5 µm

Length (mm)	125	150	250
i.d. (mm)	4.6	4.6	4.6
C18	GEN-5C18-125D	GEN-5C18-150D	GEN-5C18-250D
C8	–	–	GEN-5C8-250D
Phenyl	–	–	GEN-5PH-250D

SEMI-PREPARATIVE AND PREPARATIVE COLUMNS - 4 µm

Length (mm)	150	250
i.d. (mm)	10	10
C18	–	8P25960
Silica	8P15961	–

CONDITIONS

Column: Avantor® Genesis C18, 4 µm, 100 x 4.6 mm (p/n: FM10960E)
Mobile phase: Acetonitrile:50 mM KH₂PO₄, pH 3.0 (40:60)
Flow rate: 1.0 ml min
Detector: UV at 254 nm

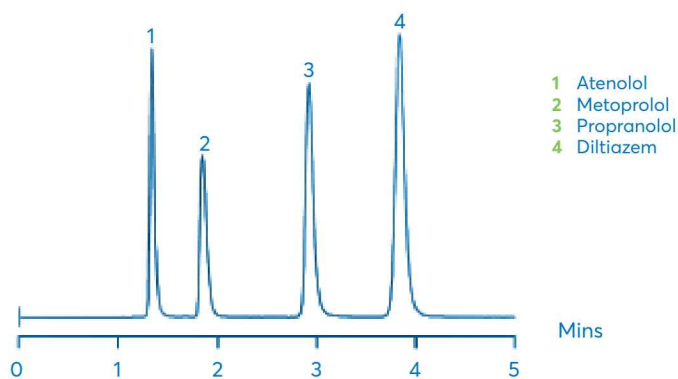


FIGURE 4: Anti-Anginal Drugs.

CONDITIONS

Column: Avantor® Genesis CN, 4 µm, 150 x 4.6 mm (p/n: FM15965E)
Mobile phase: Acetonitrile:0.05 % Trichloroacetic Acid in Water, pH 3.0
Flow rate: 1.0 ml min
Detector: UV at 254 nm

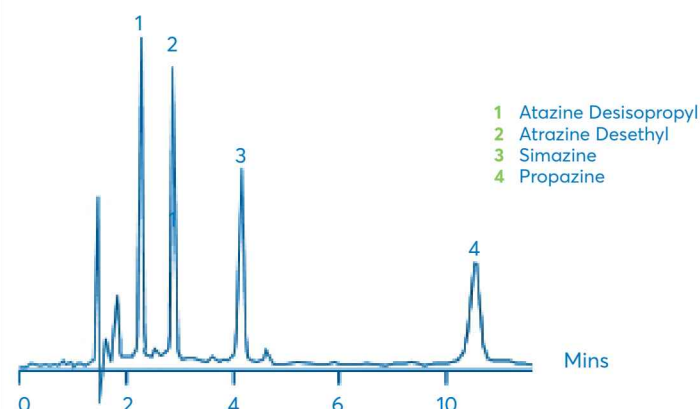


FIGURE 5: Atrazine Herbicides.