

NEW!

Reversed-phase columns for proteins

YMC-Triart Bio C4

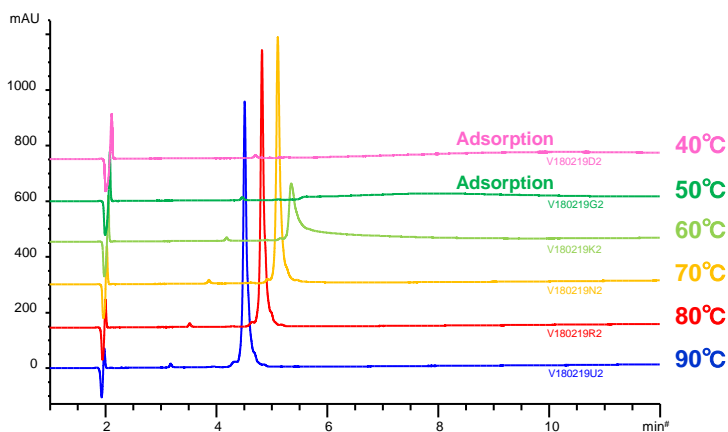
Features

- Wide-pore columns with organic/inorganic hybrid silica
- Suitable for separation of biomolecules such as proteins and oligonucleotides
- Useful for separation of intact antibodies under high temperatures
- Good peak shapes with mobile phase suitable for LC/MS

Specification

Base	: Organic/inorganic hybrid silica
Particle size	: 1.9, 3, 5 μm
Pore size	: 300 \AA
Functional group	: butyl group
Usable pH range	: 1.0-10.0
Max. temperature	: 90°C (pH 1-7) 50°C (pH 7-10)

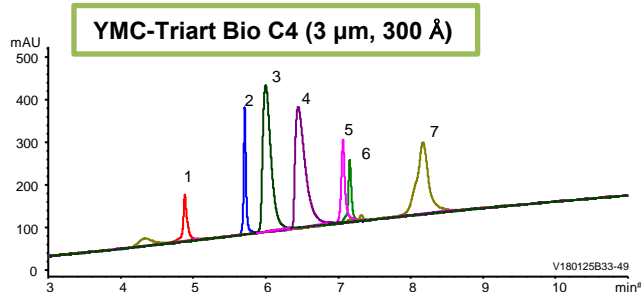
Separation of Antibody Under High Temperatures



Column	: YMC-Triart Bio C4 (3 μm , 300 \AA) 150 X 3.0 mm I.D.
Eluent	: A) water/TFA (100/0.1) B) acetonitrile/TFA (100/0.1) 30-60%B (0-15 min), 90%B (15-30 min)
Flow rate	: 0.4 mL/min
Detection	: UV at 220 nm
Sample	: Bevacizumab (0.5 mg/mL)
Injection	: 4 μL

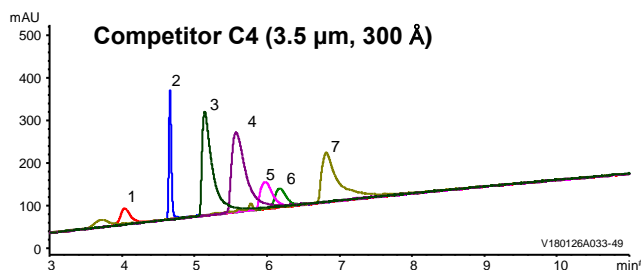
Intact monoclonal antibody was analyzed at the temperatures between 40°C and 90°C using Triart Bio C4. Good peak shapes were acquired at 70°C and higher while there was no elution at 50°C and lower. Highly durable Triart Bio C4 can perform stable analysis even at 90°C and is suitable for the reversed-phase analysis of antibodies at high temperatures.

Good Peak Shapes with Mobile Phase Suitable for LC/MS



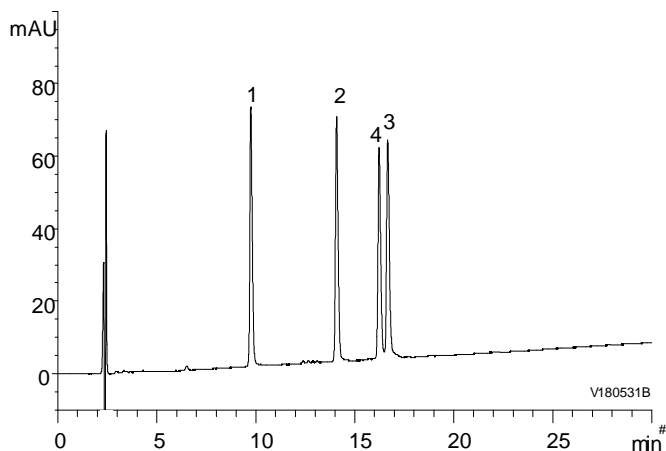
1. Cytochrome c (Horse heart)
2. Insulin (Bovine pancreas)
3. Transferrin (Human)
4. BSA
5. β -Lactoglobulin A (Bovine)
6. α -Chymotrypsinogen A (Bovine pancreas)
7. Ovalbumin

Column size	: 150 X 3.0 mm I.D. or 4.6 mm I.D.
Eluent	: A) water/formic acid (100/0.1) B) acetonitrile/formic acid (100/0.1) 10-95%B (0-15 min)
Flow rate	: 0.4 mL/min for 3.0 mm I.D. 1.0 mL/min for 4.6 mm I.D.
Temperature	: 40°C
Detection	: UV at 220 nm



Good peak shapes were obtained when analyzing proteins using Triart Bio C4 even with mobile phase containing formic acid. The result shows that Triart Bio C4 is ideal for the high sensitive analysis using LC/MS.

Analysis of Amyloid β Protein (Human)



1. Amyloid β (1-38) (MW 4132)
2. Amyloid β (1-40) (MW 4330)
3. Amyloid β (1-42) (MW 4514)
4. Amyloid β (1-43) (MW 4615)

Amyloid β (1-43) :

Asp-Ala-Glu-Phe-Arg-His-Asp-Ser-Gly-Tyr-Glu-Val-His-His-Gln-Lys-Leu-Val-Phe-Phe-Ala-Glu-Asp-Val-Gly-Ser-Asn-Lys-Gly-Ala-Ile-Ile-Gly-Leu-Met-Val-Gly-Gly-Val-Val-Ile-Ala-Thr

Column	: YMC-Triart Bio C4 (3 μ m, 300 \AA) 150 X 3.0 mm.I.D.
Eluent	: A) water/TFA (100/0.1) B) acetonitrile/TFA (100/0.1) 25-40%B (0-30 min), 90%B (30-40 min)
Flow rate	: 0.4 mL/min
Temperature	: 70°C
Detection	: UV at 220 nm
Injection	: 4 μ L (each 0.1 mg/mL)

[Ordering Information]

Particle size (μ m)	Pore size (\AA)	Column size inner diameter X length (mm)	Product number		
1.9	300	2.1 X 20	TB30SP9-02Q1PT		
		2.1 X 30	TB30SP9-03Q1PT		
		2.1 X 50	TB30SP9-05Q1PT		
		2.1 X 75	TB30SP9-L5Q1PT		
		2.1 X 100	TB30SP9-10Q1PT		
		2.1 X 150	TB30SP9-15Q1PT		
		3.0 X 50	TB30SP9-0503PT		
		3.0 X 75	TB30SP9-L503PT		
		3.0 X 100	TB30SP9-1003PT		
		3.0 X 150	TB30SP9-1503PT		
		Particle size (μ m)	Pore size (\AA)	Column size inner diameter X length (mm)	Product number
		3	300	2.1 X 20	TB30S03-02Q1PTH
2.1 X 33	TB30S03-H3Q1PTH				
2.1 X 50	TB30S03-05Q1PTH				
2.1 X 75	TB30S03-L5Q1PTH				
2.1 X 100	TB30S03-10Q1PTH				
2.1 X 150	TB30S03-15Q1PTH				
3.0 X 50	TB30S03-0503PTH				
3.0 X 75	TB30S03-L503PTH				
3.0 X 100	TB30S03-1003PTH				
3.0 X 150	TB30S03-1503PTH				
4.6 X 33	TB30S03-H346PTH				
4.6 X 50	TB30S03-0546PTH				
4.6 X 75	TB30S03-L546PTH				
4.6 X 100	TB30S03-1046PTH				
4.6 X 150	TB30S03-1546PTH				
4.6 X 250	TB30S03-2546PTH				

Particle size (μ m)	Pore size (\AA)	Column size inner diameter X length (mm)	Product number
5	300	2.1 X 20	TB30S05-02Q1PTH
		2.1 X 33	TB30S05-H3Q1PTH
		2.1 X 50	TB30S05-05Q1PTH
		2.1 X 75	TB30S05-L5Q1PTH
		2.1 X 100	TB30S05-10Q1PTH
		2.1 X 150	TB30S05-15Q1PTH
		3.0 X 50	TB30S05-0503PTH
		3.0 X 75	TB30S05-L503PTH
		3.0 X 100	TB30S05-1003PTH
		3.0 X 150	TB30S05-1503PTH
		4.0 X 150	TB30S05-1504PTH
		4.0 X 250	TB30S05-2504PTH
		4.6 X 33	TB30S05-H346PTH
		4.6 X 50	TB30S05-0546PTH
		4.6 X 75	TB30S05-L546PTH
		4.6 X 100	TB30S05-1046PTH
		4.6 X 150	TB30S05-1546PTH
		4.6 X 250	TB30S05-2546PTH

Maximum pressure : 100 MPa for 1.9 μ m, 45 MPa for 3 μ m and 5 μ m
Style of endfitting : Parker style (UPLC* compatible)
Please ask for the sizes other than those listed above.

*UPLC is a registered trademark of Waters Corporation.

Worldwide Availability

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