

ChromSpeed™ S

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Superior IgG binding capacity: > 100 g/L

- Suitable for therapeutic mAb production
- Reduces packing material cost

Extremely high bed height available: > 50 cm

- Compatible with simple structured columns
- Enables equipment cost reduction

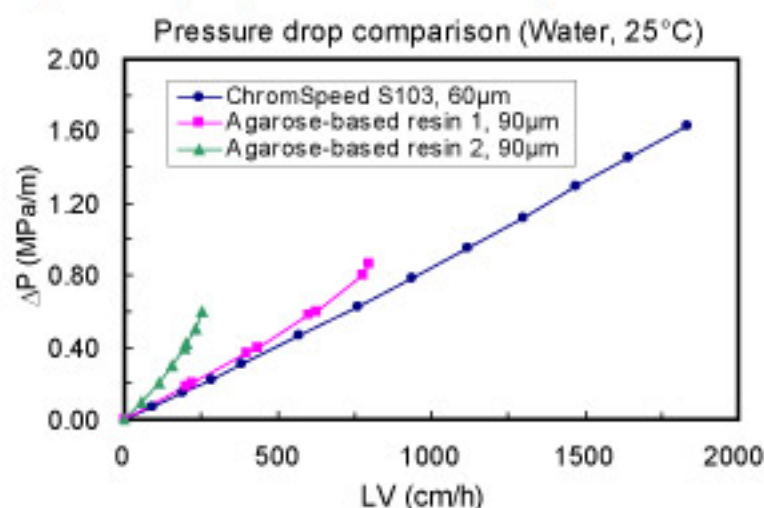
High flow rate available: > 600 cm/h

- Improves throughput
- Shorter process time suitable for higher efficacy of purified therapeutic mAb

High durability:

- Rigid spherical macroporous polymer
- Chemically and mechanically stable

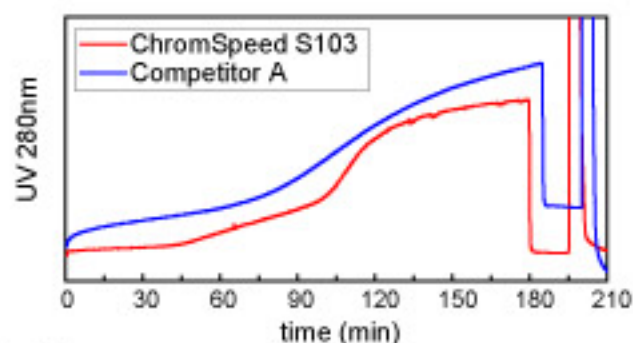
Hydraulic properties of ChromSpeed™ S



Characteristics of ChromSpeed™ S

Product	ChromSpeed™ S103
Matrix	Crosslinked polymethacrylate
Functionality	-SO ₃ ⁻
Ion exchange capacity	> 0.05 eq/L
IgG-DBC	> 100 g/L
Particle size	60µm

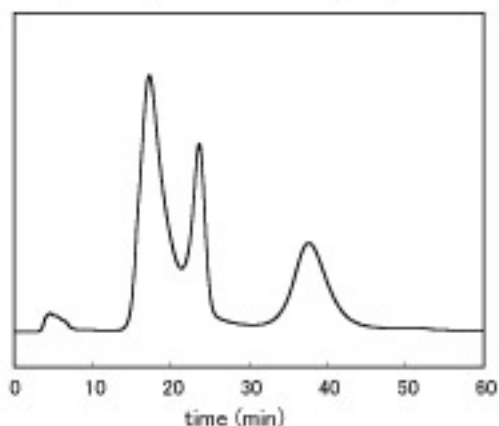
IgG binding profile comparison (Mouse polyclonal IgG, pH: 5.2)



Conditions:
 Column, 30 x 6.4 mm I.D.;
 Adsorption, mouse polyclonal IgG, 1mg/mL in 20mM Na citrate + 15mM NaCl (pH5.2)
 Washing, 20mM Na citrate (pH5.2)
 Desorption, 20mM Na citrate + 1M NaCl (pH5.2)
 Flow rate, 1.0 mL/min; Residence time, 1.0 min; Detector, UV 280 nm.

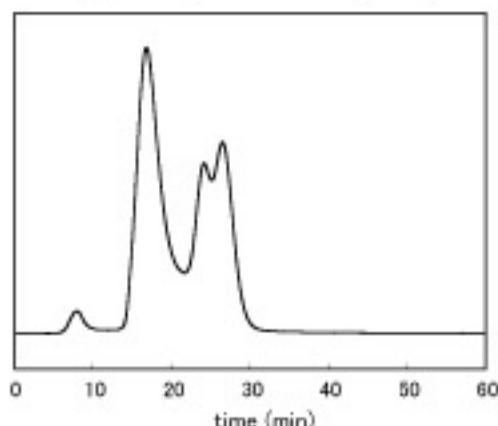
Example of protein separation on ChromSpeed™ S packed in a 50cm height column - comparison with agarose-based resin packed in a 12.5cm height column

ChromSpeed S103 (pH6.0, 0-100%B over 30min)
 Hemoglobin/Cytochrome c/Lysozyme = 25/6.25/6.25mg/2.5mL



Conditions:
 Column, 500 x 8mm I.D., 25mL
 Eluent A, 20mM Na phosphate (pH6.0);
 Eluent B, 20mM Na phosphate + 1M NaCl (pH6.0)
 Gradient, 0-100%B; Flow rate, 2.5mL/min;
 SV=6; LV=300cm/h
 Detector, UV 280nm.

Agarose-based resin (pH6.0, 0-100%B over 30min)
 Hemoglobin/Cytochrome c/Lysozyme = 25/6.25/6.25mg/2.5mL



Conditions:
 Column, 125 x 16mm I.D., 25mL
 Eluent A, 20mM Na phosphate (pH6.0);
 Eluent B, 20mM Na phosphate + 1M NaCl (pH6.0)
 Gradient, 0-100%B; Flow rate, 2.5mL/min;
 SV=6; LV=75cm/h
 Detector, UV 280nm.