



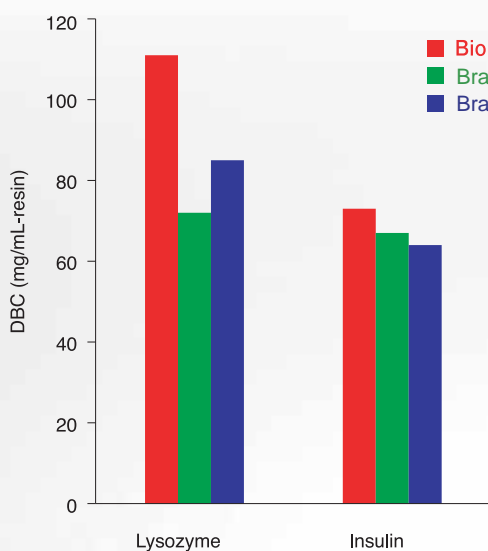
BioPro SmartSep Q/S

Features

- High-Throughput Purification by Utilizing a High Mechanical Strength Polymer Beads
- High Binding Capacity and High Resolution over a Wide Range of Flow Rate
- Suitable for Intermediate Purification Step and Polishing Step
- Available in Strong Ion Exchangers (Q and S Chemistries)
- Particle Size 30 μm for Industrial Processes and 10 μm for High Resolution Purification

High Sample Loadability

[High Dynamic Binding Capacity (DBC) for Various Samples]

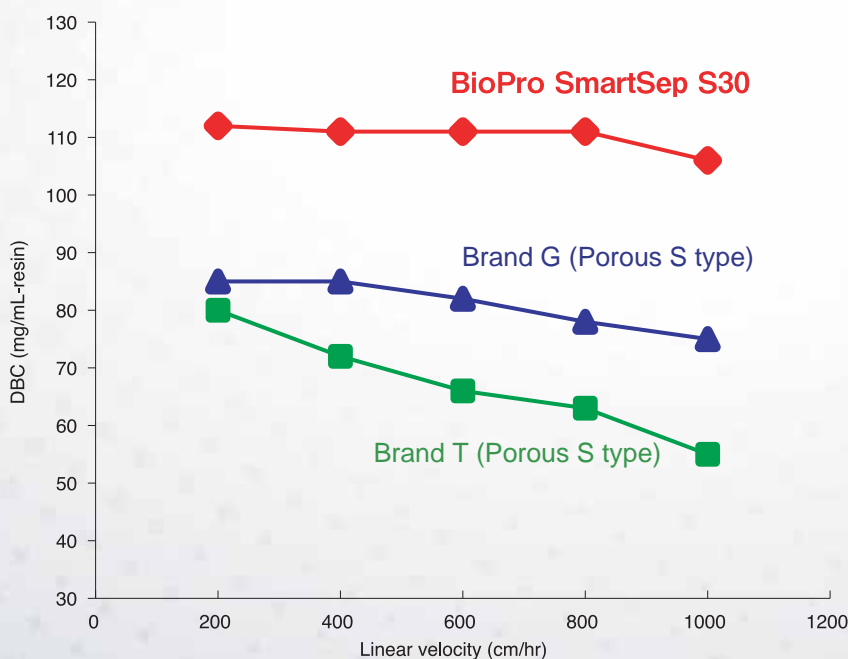


Conditions of DBC measurement*
Column : 50 X 5.0 mmI.D.
Flow rate : 400 cm/hr (1.32 mL/min)

*Please inquire us for details.

	Particle size (μm)	DBC (mg/mL-resin, 10% breakthrough)	
		Lysozyme	Insulin
BioPro SmartSep S30	30	111	73
Brand T (Porous S type)	30	72	67
Brand G (Porous S type)	30	85	64

[High DBC over a Wide Range of Flow Rate]



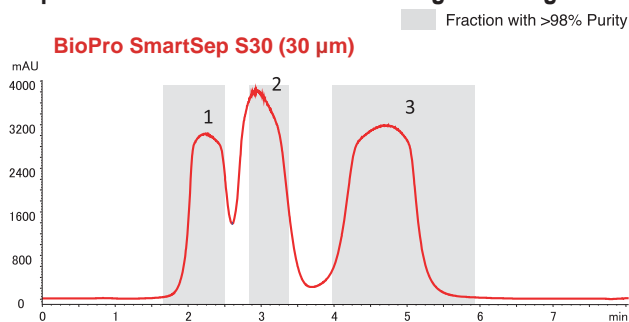
Conditions of DBC measurement*
Column : 50 X 5.0 mmI.D.
Sample : Lysozyme

*Please inquire us for details.

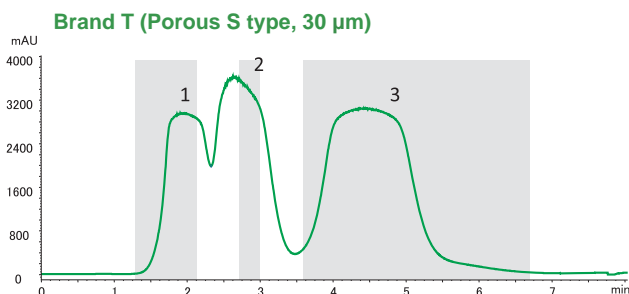
BioPro SmartSep ion exchange media have 1.1 to 1.5 times higher DBC compared to conventional ion exchange media. High DBC maintained even at a higher flow rate. This feature offers significant improvement on productivity.

High Resolution and Excellent Recovery

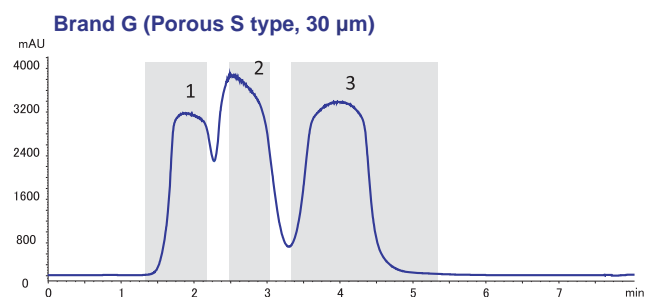
[Separation at a Fast Flow Rate and High Loading Condition] [Comparison of Recovery of Proteins]



	Recovery (>98% Purity)			
	Ribonuclease A	Cytochrome c	Lysozyme	Total
BioPro SmartSep S30	90.5 %	81.5 %	99.3 %	90.7 %
Brand T (Porous S type)	74.2 %	54.4 %	99.5 %	76.9 %
Brand G (Porous S type)	87.2 %	76.0 %	99.5 %	87.8 %



Column : 50 X 5.0 mm I.D.
 Eluent : A) 20 mM NaH₂PO₄-Na₂HPO₄ (pH 6.8)
 B) 20 mM NaH₂PO₄-Na₂HPO₄ (pH 6.8) containing 0.5 M NaCl
 0-100%B, 30 column volumes
 Flow rate : 1600 cm/hr (5.23 mL/min)
 Temperature : 25°C
 Detection : UV at 220 nm
 Injection : 20 mL (30mg Proteins)
 Sample : 1. Ribonuclease A (0.5 mg/mL)
 2. Cytochrome c (0.5 mg/mL)
 3. Lysozyme (0.5 mg/mL)



BioPro SmartSep ion exchange media show high resolution and recovery even at a fast flow rate and high loading condition. BioPro SmartSep ion exchange media offer high efficiency on intermediate purification step and polishing step requiring high resolution and recovery.

Lineup

	Strong Anion Exchanger BioPro SmartSep Q	Strong Cation Exchanger BioPro SmartSep S
Matrix	Hydrophilic porous polymer	
Particle size (µm)	10, 30	
Ion exchanger	-R-N ⁺ (CH ₃) ₃	-R-SO ₃ ⁻
pH range	2 - 12	

Please inquire us other than those listed above.



BioPro SmartSep (30 µm)



Screening kit for resin selection and method development

BioPro Ion Exchange Screening Kit is a kit of screening columns that are packed with BioPro ion exchange resins designed for separation of Proteins, Nucleotides and other biomolecules. Various types of kit offer significant advantage and efficiency in resin screening and purification method development.

Worldwide Availability

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YMC India Pvt.Ltd.
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YMC CO., LTD.

YMC Karasuma-Gojo Bldg., 284 Daigo-cho
 Karasuma Nishiiru Gojo-dori, Shimogyo-ku
 Kyoto, 600-8106, Japan
 TEL: +81-75-342-4515 FAX: +81-75-342-4550
 www.ymc.co.jp sales@ymc.co.jp

Distributor