

TSKgel SP-3PW (30) Resins

A new small particle cation exchange resin with improved binding capacity for peptides.

TSKgel
PRODUCT OVERVIEW

Introduction

TSKgel SP-3PW (30) resin products are prepared on the TSKgel 3000PW 250Å pore base bead (not available for sampling). It uses a different technology in its manufacturing process and has a higher particle size "in range" specification of >90%, than TSKgel SP-5PW (30) resin. It was developed for peptides the size of insulin.

Product Highlights

Improved dynamic binding capacity (DBC) (Table 1)

- Typical insulin DBC of 49g/L
- The new product has twice the DBC of TSKgel SP-5PW (30)
- It is one of the highest DBC small particle resins commercially available

Unique Selectivity (Figure 1)

- It can demonstrate a different elution order than TSKgel SP-5PW resins
- It also may offer more resolution than other commercial small particle materials because of its better "particle size in range" specification

Improved Fluid Dynamics

- Stable to pressures up to 3 bar
- Low elution pool volume (Figure 2)

Table 1. Insulin Dynamic Binding Capacity Comparison DBC: calculated by 10% breakthrough

	TSKgel SP-3PW (30)	TSKgel SP-5PW (30)	SOURCE 30S
Matrix	polymethacrylate	polymethacrylate	polystyrene divinylbenzene
Particle size	30µm	30µm	30µm
Insulin capacity	49g/L	24g/L	45g/L
Pore size	250Å	1,000Å	NR

Column: 4.6mm ID x 7.5cm
 Eluent: Gradient elution with 1-propanol by acidic buffer (pH 3.0) containing neutral salt
 Flow rate: 0.75mL/min (270cm/hr)
 Sample: recombinant insulin (7.2g/L)

Figure 1. Selectivity Comparison - Insulin

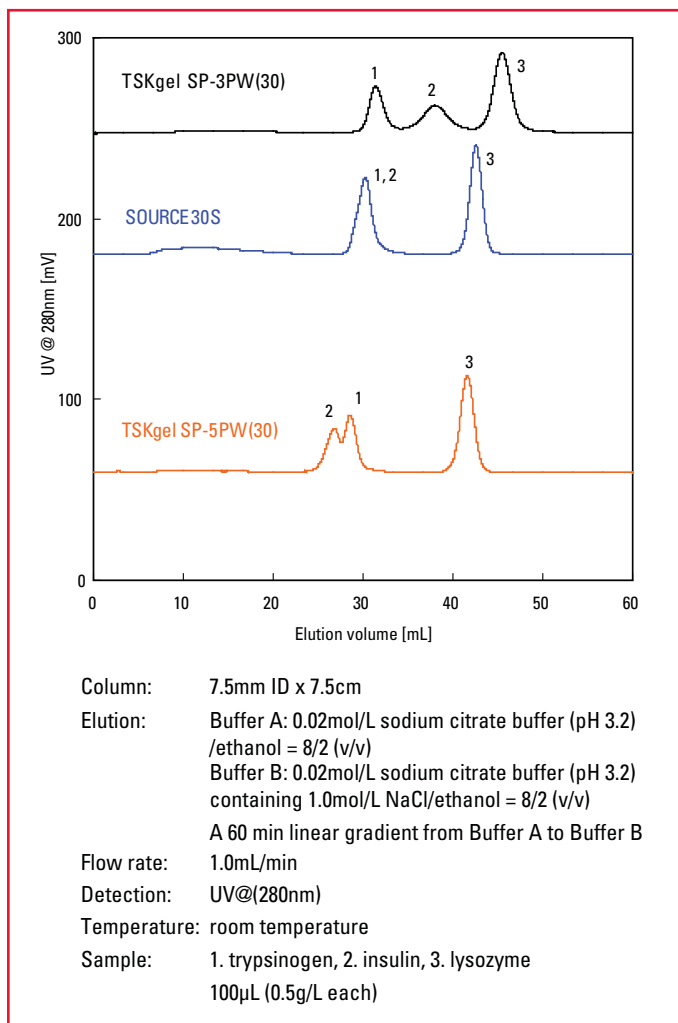
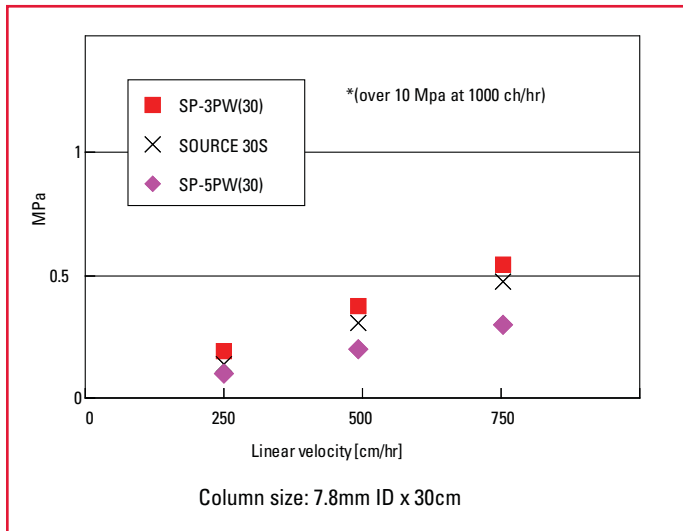


Figure 2. Pressure-Flow Property Comparison



Source is a trademark of GE Healthcare

Ordering Information

Part #	Description	Resin Vol.
21976	TSKgel SP-3PW (30)	25mL
21977	TSKgel SP-3PW (30)	250mL
21978	TSKgel SP-3PW (30)	1L
21979	TSKgel SP-3PW (30)	5L
21980	TSKgel SP-3PW (30)	50L



TOSOH

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