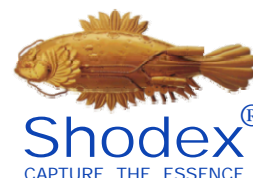


Protein Analysis by GFC

KW-800 and KW400 HPLC columns



KW-800 and KW400 series HPLC columns are specifically designed for protein analysis by aqueous size exclusion chromatography (GFC). They are packed with porous silica particles coated with a hydrophilic copolymer.

Advantages

| KW-800 | KW400 |
|--|--|
| <ul style="list-style-type: none"> • High protein recovery rates • Highest sample load • Recommended for older HPLC systems | <ul style="list-style-type: none"> • High protein recovery rates • 3 to 4 times greater sensitivity • 1.5 times higher TPN • Faster analyses • ~60% less eluent consumption |

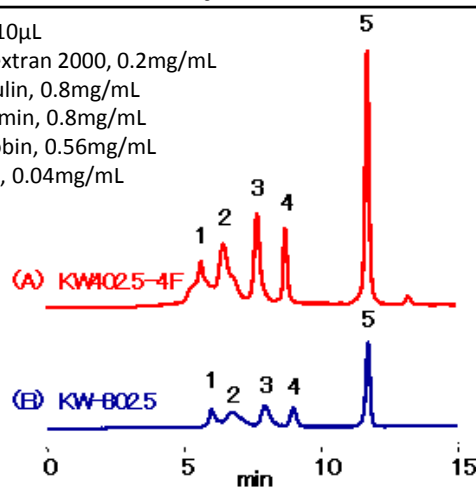
High Recovery Rates

| Protein | Recovery (%) | |
|------------------------|--------------|------------|
| | KW-802.5 | KW402.5-4F |
| γ - Globulin | 91 | 98 |
| Bovine serum albumin | 94 | 89 |
| Ovalbumin | 89 | 89 |
| Myoglobin | 92 | 90 |
| Cytochrome c | 100 | 92 |
| Lysozyme | 98 | 87 |
| α - Chymotrypsinogen A | 93 | 95 |

Enhanced Sensitivity of KW400

Sample : 10μL

1. Blue dextran 2000, 0.2mg/mL
2. γ-Globulin, 0.8mg/mL
3. Ovalbumin, 0.8mg/mL
4. Myoglobin, 0.56mg/mL
5. Uridine, 0.04mg/mL



Columns : (A) Shodex KW402.5-4F
(4.6 I.D. x 300 mm)
(B) Shodex KW-802.5
(8.0 I.D. x 300 mm)

Eluent : 50mM Sodium phosphate buffer (pH 7.0)
+ 0.3 M NaCl

Flow rate : (A); 0.33 mL/min, (B); 1.0 mL/min

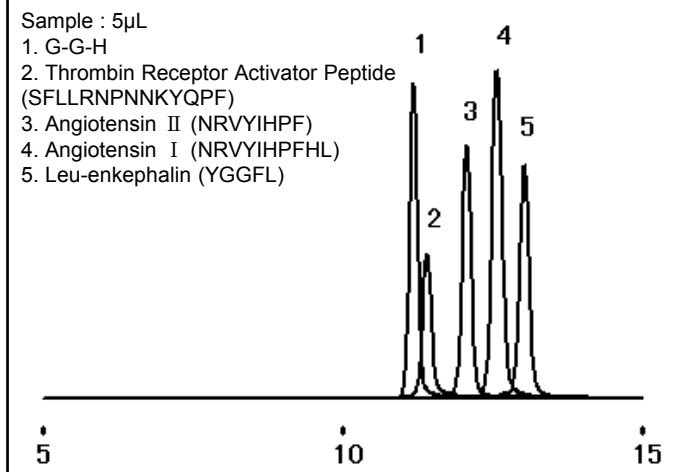
Detector : UV (280 nm)

Column temp. : Room temp.(25°C)

Peptide Analysis

Sample : 5μL

1. G-G-H
2. Thrombin Receptor Activator Peptide (SFLLRNPNKYQPF)
3. Angiotensin II (NRVYIHPF)
4. Angiotensin I (NRVYIHPFHL)
5. Leu-enkephalin (YGGFL)



Column : Shodex KW402.5-4F

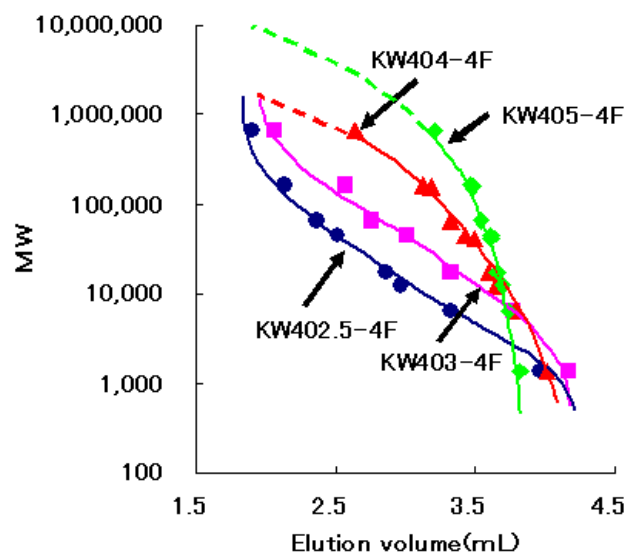
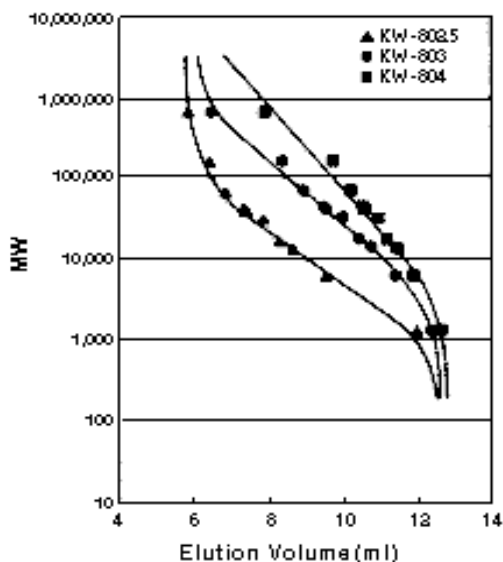
Eluent : 50 mM Sodium Phosphate buffer (pH 7.0)
+ 0.3 M NaCl

Flow rate : 0.33 mL/min

Detector : UV (220nm)

Column temp. : 30°C

Calibration Curves



Columns : (A) Shodex **KW-800 series** (8.0 I.D. x 300 mm),
 (B) Shodex **KW400-4F series** (4.6 I.D. x 300 mm)
 Eluent : 50 mM Sodium phosphate buffer (pH 7.0) + 0.3 M NaCl
 Flow rate : (A) 1.0 mL/min, (B): 0.33 mL/min
 Detector : (A) UV (220 nm), (B): UV (280 nm)
 Column temp. : Room temp. (25°C)

Column Specifications

| Column series | Column Name | Size (mm) I.D. × L | Plate Number (TP/column) | Exclusion Limit | | Particle Size (µm) | Pore Size (Å) | |
|---------------|-------------|-----------------------|-----------------------------|-----------------|------------|--------------------|---------------|-------|
| | | | | Pullulan | Protein | | Max. | Avg. |
| KW-800 | KW-802.5 | 8.0 × 300 | > 21,000 | 60,000 | 150,000 | 5 | 400 | 150 |
| | KW-803 | 8.0 × 300 | > 21,000 | 170,000 | 700,000 | 5 | 1,000 | 300 |
| | KW-804 | 8.0 × 300 | > 16,000 | 500,000 | 1,000,000 | 7 | 1,500 | 500 |
| | KW-G | 6.0 × 50 | (Guard) | — | — | 7 | — | — |
| KW400 | KW402.5-4F | 4.6 × 300 | > 35,000 | 60,000 | 150,000 | 3 | 400 | 150 |
| | KW403-4F | 4.6 × 300 | > 35,000 | 150,000 | 600,000 | 3 | 800 | 250 |
| | KW404-4F | 4.6 × 300 | > 25,000 | 500,000 | 1,000,000 | 5 | 1,500 | 500 |
| | KW405-4F | 4.6 × 300 | >25,000 | 1,300,000 | 20,000,000 | 5 | 2,000 | 1,000 |
| | KW400G-4A | 4.6 × 10 | (Guard) | — | — | 5 | — | — |

For price quotes and technical information, please contact Shodex or a distributor near you



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