HYDROCELL RP 5D and RP 10D are produced from macroporous PS-DVB beads, which have high pore volume and permeability. Their major advantages are lower back pressure and higher permeability in the operation. These media also reduce the back pressure fluctuation when they are used in the gradient separations.

- **RP 5D** is prepared from 5 µm (d_{50}), 1500 Å spherical PS-DVB particles. It provides high separating efficiency for large proteins, polypeptides, oligonucleotides and other macromolecules.

- **RP 10D** is prepared from 10 µm (d_{50}), 1500 Å spherical PS-DVB particles. The applications are the same as **RP 5D**.

Hydrocell RP 5D

Protein Mixture

Column: 150 x 2.1 mm
Mobile Phase:
 A: 5% Acetonitrile in 0.1% TFA
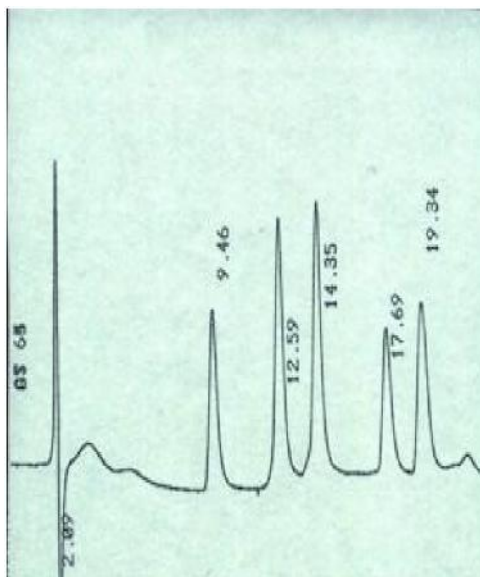 B: 95% Acetonitrile in 0.1% TFA
Gradient:
Linear, 20-70% B in 25 minutes
Flow Rate: 0.25 mL/min
Detection: UV 280 nm
Peak Identification:
1. Ribonuclease A
2. Cytochrome C
3. Lysozyme
4. Myoglobin
5. Ovalbumin

Hydrocell RP 10D

Protein Mixture

Column: 150 x 2.1 mm
Mobile Phase:
 A: 5% Acetonitrile in 0.1% TFA
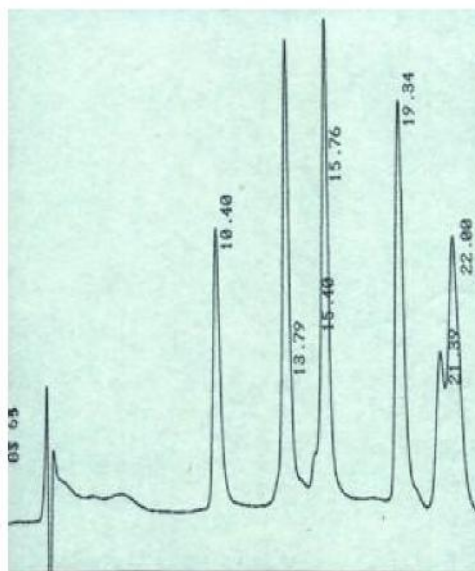 B: 95% Acetonitrile in 0.1% TFA
Gradient:
Linear, 20-70% B in 25 minutes
Flow Rate: 0.25 mL/min
Detection: UV 280 nm
Peak Identification:
1. Ribonuclease A
2. Cytochrome C
3. Lysozyme
4. Myoglobin
5. Ovalbumin

Hydrocell Reversed Phase Columns RP 10D and RP SD for Direct High Molecular Weight of Protein and Enzyme Analyses and Purification

BioChrom Labs, Inc. provides innovative macroporous polymer beads (RP 10D and 5D) for direct protein and enzyme analysis and purification. Hydrocell Reversed Phase Columns are produced from high cross-linked, macroporous PS-DVB polymer beads. They can be used to analyze and separate small peptide, polypeptides and high molecular weight proteins and enzymes in a single column. The Hydrocell Reversed Phase columns effectively separate and analyze molecular weights of biomolecules more than 290 KDa in size. It is easy during the method development to use Hydrocell Reversed Phase columns for biomolecular separation and analysis. The gradient profiles of RP 10D and RP 5D are similar to gradient profiles in the conventional Silica based C-18 columns. Under the What is New section of the BioChrom Website, www.biochrom.com, you can see the demonstrating chromatograms using the RP 5D column to separate small peptides from 2-10 amino acids, and to analyze commercial human insulin and bovine insulin. You can also see the demonstrating chromatograms by using the RP 10D column to separate standard proteins molecular weight from 12.3 KDa. to 44.3 KDa., to separate high molecular weight of proteins and enzymes from 12.3 KDa. to 290 KDa., and to purify Thyroglobulin, molecular weight 670 KDa.

HYDROCELL RP 5D

Column: 150 x 4.6mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1 m Tris-HCl and 0.1% TFA
 B: 50% Acetonitrile in 0.1 m Tris-HCL and 0.1% TFA

Gradient: 10-80% B in 35 minutes
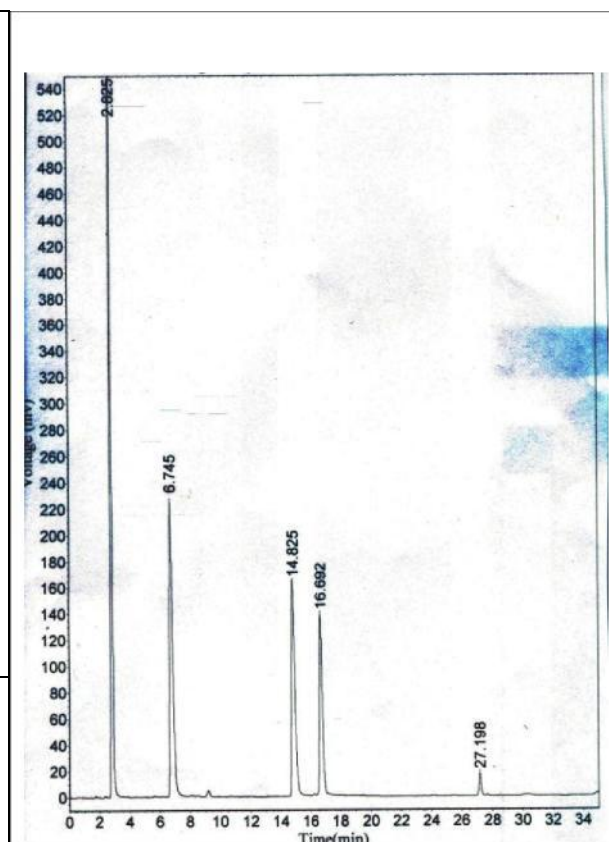**Flow Rate:** 1 mL/min
Detection: UV 280 nm
Injection Volume: 20uL

Sample: Standard Peptide Sample
1.Gly-Tyr 2. Val-Tyr-Val 3. methionine enkephalin
4. leucin enkephalin 5. angiotensin II

Catalog Number: 34-23RP-D

Column: 150 x 4.6 mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1% TFA
 B: 95% Acetonitrile in 0.1% TFA

Gradient: 20-70% B in 25 minutes
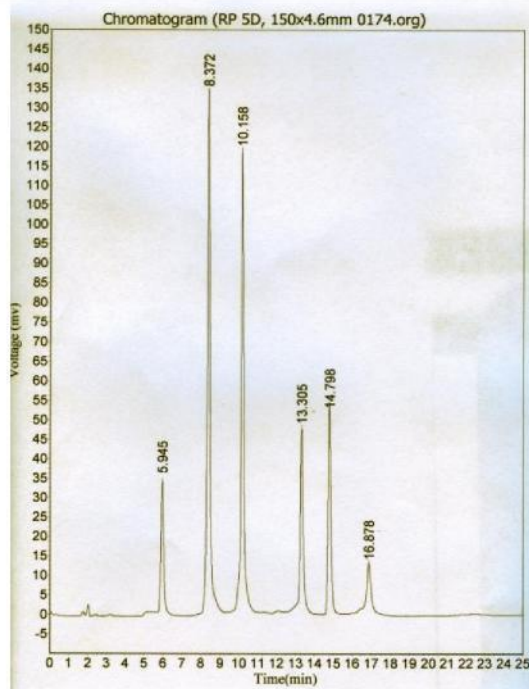**Flow Rate:** 1.0 mL/minute
Detection: UV 280 nm
Injection Volume: 20uL

Sample: Reversed Phase Standard
Protein Mixture
1. Ribonuclease A 2. Cytochrome C
 3. Lysozyme 4. Myoglobin 5.Ovalbumin

Catalog Number: 34-25RP-D

Chromatogram (RP 5D, 150x4.6mm 0174.org)

Column: 150 x 2.1 mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1 m Tris-HCl and
0.1% TFA
 B: 50% Acetonitrile in 0.1 m Tris-HCL and
0.1% TFA

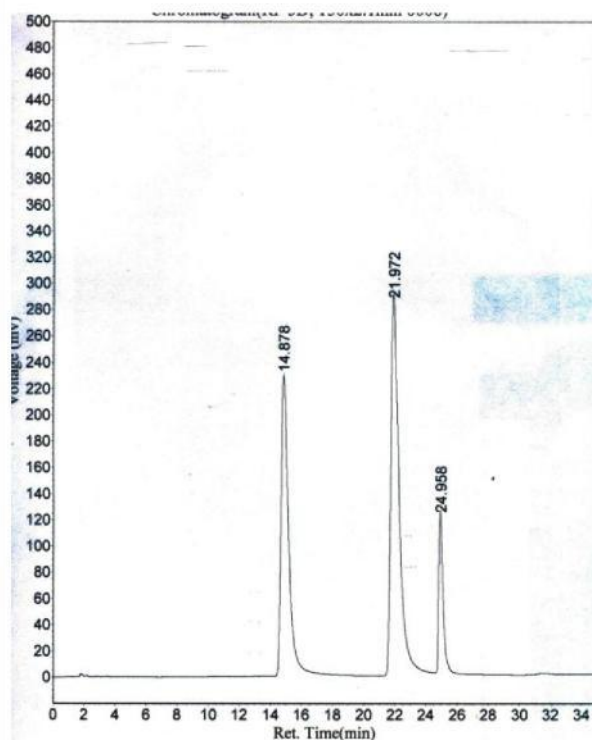**Gradient:** 20-100% B in 35 minutes
Flow Rate: 0.25 mL/min
Detection: UV 280 nm
Injection Volume: 5uL

Sample: Standard polyeptide Sample
1.Commercial human Insulin from
Novolog FlexPen 100 unites / mL

Catalog Number: 24-23RP-D

Column: 150 x 2.1 mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1 m Tris-HCl and 0.1% TFA
 B: 50% Acetonitrile in 0.1 m Tris-HCL and 0.1% TFA

Gradient: 20-100% B in 35 minutes
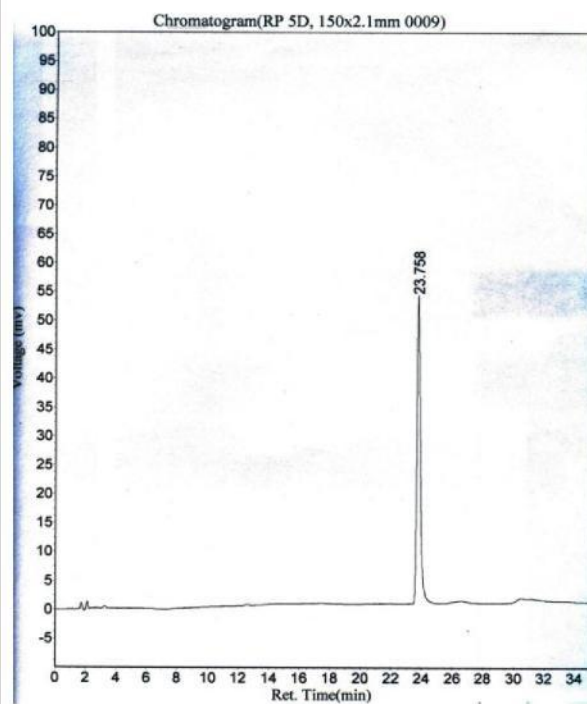**Flow Rate:** 0.25 mL/min
Detection: UV 280 nm
Injection Volume: 5uL

Sample: Standard polyeptide Sample
1. Bovine Pancreas Insulin,1mg/mL

Catalog Number: 24-23RP-D

Chromatogram(RP 5D, 150x2.1mm 0009)

23.758

Voltage (mv)

Ret. Time(min)

HYDROCELL RP 10D

Column: 150 x 4.6 mm

Mobile Phase:
A: 5% Acetonitrile in 0.1% TFA
B: 95% Acetonitrile in 0.1% TFA

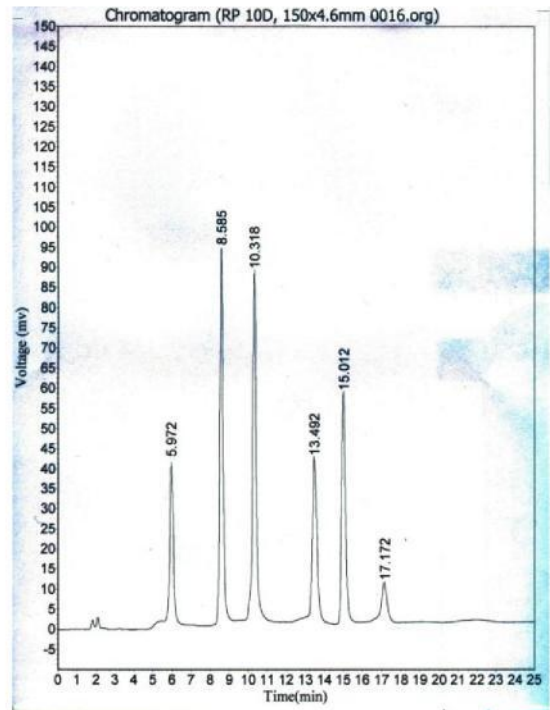**Gradient:** 20-70% B in 25 minutes
Flow Rate: 1.0 mL/min
Detection: UV 280 nm
njection Volume: 20uL

Sample: Reversed Phase Standard
Protein Mixture
1. Ribonuclease A 2. Cytochrome C
3. Lysozyme 4. Myoglobin 5.Ovalbumin

Catalog Number: 34-35RP-D

Chromatogram (RP 10D, 150x4.6mm 0016.org)

Column: 150 x 2.1 mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1% TFA
 B: 95% Acetonitrile in 0.1% TFA

Gradient: 20-90% B in 35 minutes
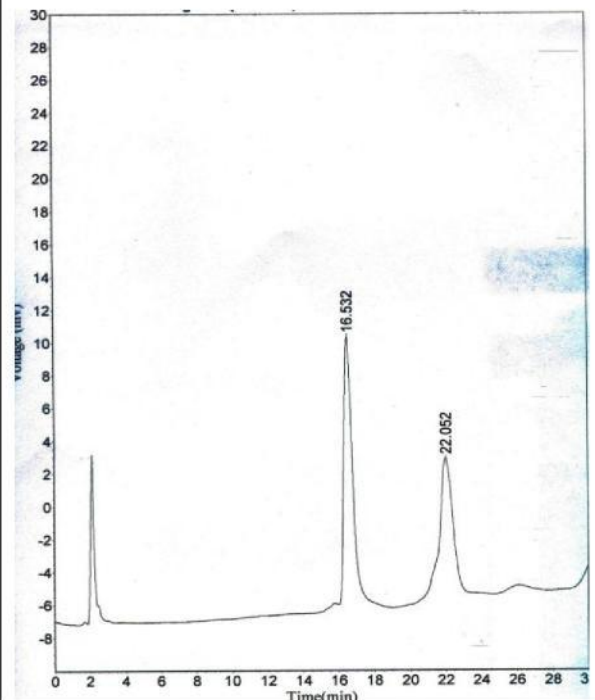**Flow Rate:** 0.25 mL/min
Detection: UV 280 nm
Injection Volume: 10 uL

Sample: Reversed Phase Standard
 1. Albumin from Bovine (66.3 KDa)
 2. Albumin from Chicken Egg White
(44.3 KDa)

Catalog Number: 24-35RP-D

Column: 150 x 2.1 mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1% TFA
 B: 95% Acetonitrile in 0.1% TFA

Gradient: 20-90% B in 35 minutes
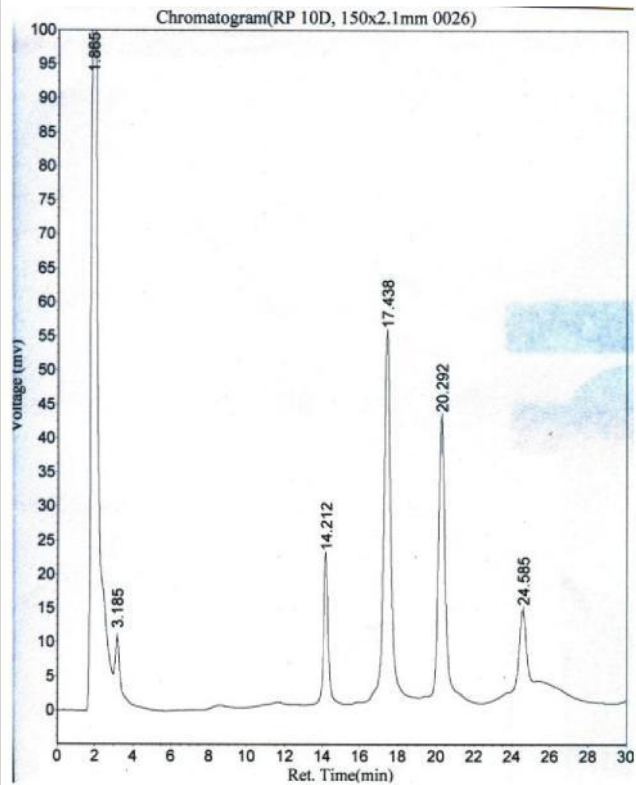
Flow Rate: 0.25 mL/min

Detection: UV 280 nm

Injection Volume: 10 uL

Sample: Reversed Phase Standard
 1. Cytochrome C (12.3 KDa)
 2. Lactoferrin (80.0 KDa)
 3. L-Gutamic Dehydrgenase (290 KDa)
 4. Lactate Dehydrogenase (142 KDa)

Catalog Number: 24-35RP-D

Chromatogram(RP 10D, 150x2.1mm 0026)

Scroll down for more chromatograms.

Column: 150 x 2.1 mm

Mobile Phase:
 A: 5% Acetonitrile in 0.1% TFA
 B: 95% Acetonitrile in 0.1% TFA

Gradient: 20-90% B in 20 minutes
Flow Rate: 0.3 mL/min
Detection: UV 280 nm
Injection Volume: 10 uL

Sample: Reversed Phase Standard
1. Thyroglobulin (670 KDa)

Catalog Number: 24-35RP-D