Polymeric HPLC columns for biomolecule separations

- Fast Separation
- High resolution and efficiency
- Excellent protein recoveries
- High loading capacity
- Wide pH range of 1 -to- 14
- High Pressure Limit of 400 Psi
- High temperature limit : 80°C

RP 5S and RP 10S

5 & 10 µm PS-DVB particles with a porosity of 500 Å. These particles have high pore volume and large pore size. Hydrocell RP S series exhibits high permeability and reduces back pressure in gradient separations

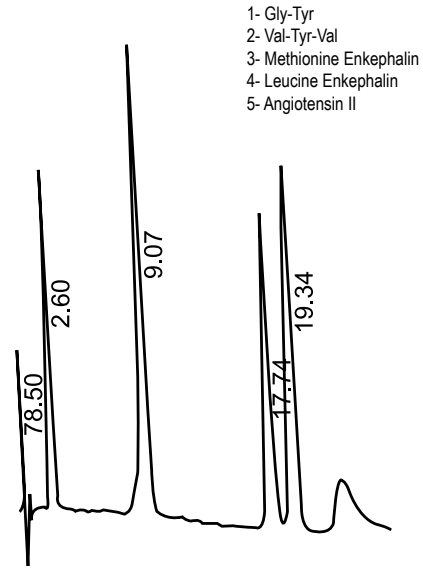
- **RP 5S** : Optimum pore volume and pore size with increasing permeability and high separating efficiency for small drugs, peptides and other small biomolecules.
- **RP 10S** : Increased permeability, reduction of back pressure and is suitable for the separation of peptides, oligonucleotides and other biomolecules.

RP 5G and RP 10G

Highly cross-linked Polystyrene-divinyl benzene (PS-DVB) spherical beads. The surface of the materials has been modified by hydrophilic coating to reduce the hydrophobicity and the small pores of these particles have been sealed to prevent the trapping of biomolecules. These supports are suitable for reversed phase analysis and purification of small polypeptides, oligonucleotides and proteins.

- **RP 5G** : Spherical PS-DVB particles with hydrophilic surface coating. Applications : small drugs, and polypeptides analysis.
- **RP 10G** : Spherical PS-DVB particles with hydrophilic surface coating. Applications : polypeptides, proteins and oligonucleotides analysis

Hydrocell RP 10S
Peptide standard



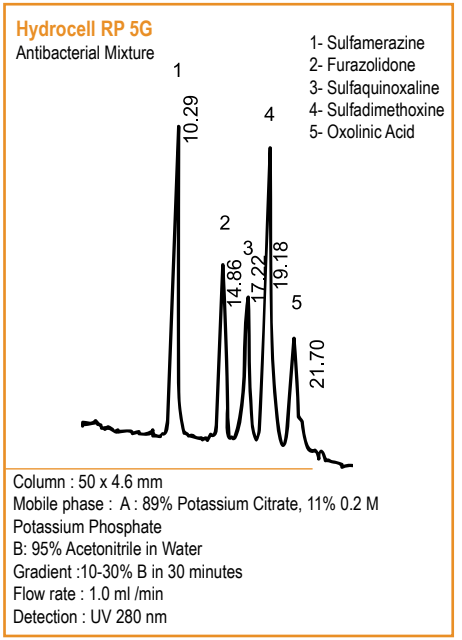
Peptide Standard
Column : 50 x 4.6 mm
Mobile Phase :
A : 5% Acetonitrile in 0,1 M Tris-HCl & 0,1% TFA
B: 50% Acetonitrile in 0,1 M Tris-HCl & 0,1% TFA
Gradient : Linear, 0-80% B in 40 minutes
Flow rate : 1.0 ml /min
Detection : UV 280 nm

Polymeric Hydrocell columns

RP 5D and RP 10D

5 µm and 10 µm PS-DVB particles respectively with a porosity of 500 Å. These particles have high pore volume and permeability. Hydrocell RP D series exhibits high permeability and reduces back pressure in gradient separations

The optimum pore volume and large pore size with increased permeability and high separating efficiency make the RP D series suitable for the separation of large proteins, polypeptides, oligonucleotides and other macromolecular analysis.



Dimension	RP0.4 5T	RP 5S	RP 5G	RP 10S	RP 10G	RP 5D	RP 10D
Analytical stainless steel column							
50 x 1.0 mm	12-21RP-T	12-23RP-S	12-23RP-G	12-34RP-S	12-34RP-G	12-25RP-D	12-35RP-D
150 x 1.0 mm	14-21RP-T	14-23RP-S	14-23RP-G	14-34RP-S	14-34RP-G	14-25RP-D	14-35RP-D
50 x 2.1 mm	22-21RP-T	22-23RP-S	22-23RP-G	22-34RP-S	22-34RP-G	22-25RP-D	22-35RP-D
150 x 2.1 mm	24-21RP-T	24-23RP-S	24-23RP-G	24-34RP-S	24-34RP-G	24-25RP-D	24-35RP-D
250 x 2.1 mm	26-21RP-T	26-23RP-S	26-23RP-G	26-34RP-S	26-34RP-G	26-25RP-D	26-35RP-D
50 x 4.6 mm	32-21RP-T	32-23RP-S	32-23RP-G	32-34RP-S	32-34RP-G	32-25RP-D	32-35RP-D
150 x 4.6 mm	34-21RP-T	34-23RP-S	34-23RP-G	34-34RP-S	34-34RP-G	34-25RP-D	34-35RP-D
250 x 4.6 mm	36-21RP-T	36-23RP-S	36-23RP-G	36-34RP-S	36-34RP-G	36-25RP-D	36-35RP-D
75 x 7.8 mm	43-21RP-T	43-23RP-S	43-23RP-G	43-34RP-S	43-34RP-G	43-25RP-D	43-35RP-D
150 x 7.8 mm	44-21RP-T	44-23RP-S	44-23RP-G	44-34RP-S	44-34RP-G	44-25RP-D	44-35RP-D
250 x 7.8 mm	46-21RP-T	46-23RP-S	46-23RP-G	46-34RP-S	46-34RP-G	46-25RP-D	46-35RP-D
150 x 10 mm	54-21RP-T	54-23RP-S	54-23RP-G	54-34RP-S	54-34RP-G	54-25RP-D	54-35RP-D
250 x 10 mm	56-21RP-T	56-23RP-S	56-23RP-G	56-34RP-S	56-34RP-G	56-25RP-D	56-35RP-D
Guard column & gels	RP 5T	RP 5S	RP 5G	RP 10S	RP 10G	RP 5D	RP 10D
Guard Kit (1 support + 2 cartridges)							
20 x 4 mm	21RP-T-GCK1	23RP-S-GCK1	23RP-G-GCK1	34RP-S-GCK1	34RP-G-GCK1	25RP-D-GCK1	35RP-D-GCK1
10 x 2 mm	21RP-T-GCK2	23RP-S-GCK2	23RP-G-GCK2	34RP-S-GCK2	34RP-G-GCK2	25RP-D-GCK2	35RP-D-GCK2
Guard cartridges							
20 x 4 mm	21RP-T-C1	23RP-S-C1	23RP-G-C1	34RP-S-C1	34RP-G-C1	25RP-D-C1	35RP-D-C1
10 x 2 mm	21RP-T-C2	23RP-S-C2	23RP-G-C2	34RP-S-C2	34RP-G-C2	25RP-D-C2	35RP-D-C2
Gel (1 g)	21RP-T-G	23RP-S-G	23RP-G-G	34RP-S-G	34RP-G-G	25RP-D-G	35RP-D-G

Biochromatography - Reverse Phase

Protein and Peptide standards

Interchim offer a range of high purity protein and peptide standards for their Biochromatography range of reverse phase HPLC columns

Protein standards

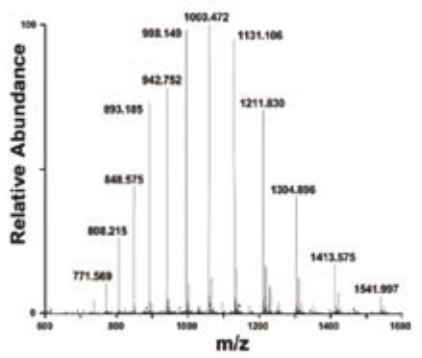
High quality protein and peptide standards for use in the calibration of LC, LC-MS, ESI-MS, Electrophoresis, enzymatic digestion. For quality assurance and standardization purposes, each standard protein is provided with a high resolution mass spectrum of the protein.

Applications :

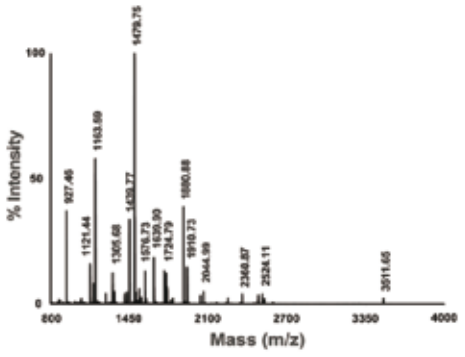
- Calibration and standardisation of protein analysis by ESI-MS
- Enzymatic digestion and characterisation of LC-MS systems
- Molecular weight markers for SDS-PAGE gels

Protein	Source	Molecular Weight (kDa)
Cytochrome C	Equine heart	12.0
Lysozyme	Chicken egg white	14.3
Myoglobin	Equine heart	17.0
Carbonic Anhydrase	Bovine Erythrocytes	29.0
Ovalbumin	Chicken egg white	45.0
Bovine Serum Albumin (BSA)	Bovine Serum	66.0

High resolution mass spectrum of Cytochrome C



MALDI peptide mass fingerprint of BSA



Protein digest standards

500 pmol of lypohilized mixture, of tryptically digested peptides, ideal for the calibration and standardization of LC/MS applications.

Applications :

- Calibration
- Standardization of LC/MS applications

Peptide Standards

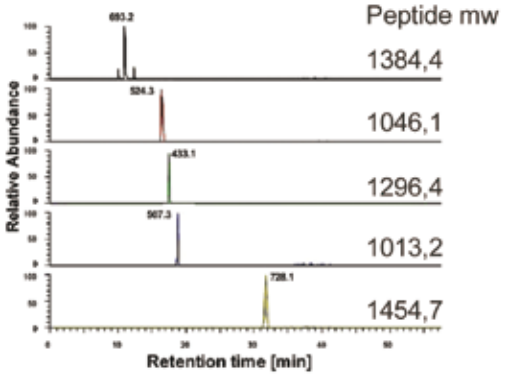
Mixture of 5 lyophilized peptides ideal for :

- Calibration
- Standardisation of peptide based chromatographic applications
- Troubleshooting chromatographic separations

Peptide standards can be used in aqueous buffers.

E.g :
RP buffers and MS : 0.1 % TFA, 2 % Acetonitrile, 98 % water
Gel electrophoresis buffer : tris-glycine

Mass selection based peakl plots from the LC-MS analysis of the RP peptide retention standard. CL2290



P/N	Description	Qty
MS grade Protein standards		
CL2220	Bovine Serum Albumin (BSA) [bovine serum]	50 mg
CL2230	Carbonic Anhydrase [bovine erythrocytes]	25 mg
CL2240	Cytochrome C [equine heart]	25 mg
CL2250	Lysozyme [chicken egg white]	50 mg
CL2260	Myoglobin [equine heart]	50 mg
CL2270	Ovalbumin [chicken egg white]	50 mg
CL2280	Mixture of 25mg of each (6x) protein standard (CL2220 to CL2270)	150 mg
Reverse Phase Peptides standards		
CL2290	Peptide Retention Standard for reversed phase LC-MS	10 injections
Protein digest standards		
CL2300	Cytochrome C digest standard, 500 pmol	1
CL2301	Cytochrome C digest standard, 500 pmol	3
CL2330	Ovalbumin digest standard, 500 pmol	1
CL2331	Ovalbumin digest standard, 500 pmol	3
CL2340	Bovine serum albumin (BSA) digest standard, 500 pmol	1
CL2341	Bovine serum albumin (BSA) digest standard, 500 pmol	3
CL2350	Mixture of 3 Protein digest standards (CL2300, CL2330 and CL2340)	1