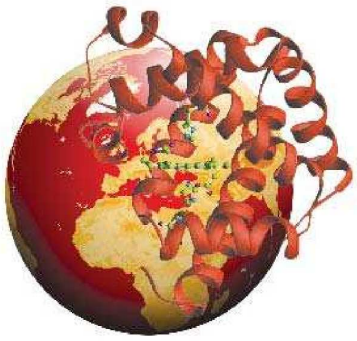
Europa HPLC Column for Peptides and Proteins

by Teknokroma
Europa®



Introduction

Teknokroma introduces in the market the new line of **Europa C 18 HPLC columns**.

After the versatility of our popular **Mediterranea Sea 18** column that enables you to deal successfully with the inmense variety of separations in the fields of pharmaceuticals, life sciences, environment, foods, etc.
Teknokroma has focused all its efforts and all its know-how, accumulated through more than 27 year of chromatographic research and development, in offering the best reverse phase HPLC packing for identification and purification of peptides and protein compounds: Europa C 18.

As a result of these, we launch into the market the Line of Europa HPLC columns, one of the best columns in the field of analysis of biomolecules.
The Europa HPLC columns for peptides and proteins, provide the best performance and unsurpassed efficiency, reliability and reproducibility.

Manufactured using novel proprietary technologies, analytical and preparative Europa columns are simply the best reverse phase columns available today.

Teknokroma's Europa Columns are uniquely designed with optimized pore size distribution; 120Å for Peptide and 300Å for the Protein Columns.

We invite you to try our Europa C18 when you experience less. than satisfactory results with your favorite column.

There is still a consensus that the best material to use as chromatographic packing continues to be silica. The particles of silica material are physically resistant, enable multiple functions, present maximum levels of efficiency and are also compatible with practically all solvents.

Teknokroma has dedicated years of research and development in obtaining the best silica particle on the market. The silica particle on which the Europa C 18 columns is based is the result of an optimisation process, starting with extremely pure materials with unusually low metal content, and obtaining a perfectly spherical, rigid and inert particle.

Furthermore, the propietary "porification process" (Surface Enhanced Accessibility, SEA) for Europa C18 silica has achieved high surface area without sacrificing important properties like physical resistence and high loading capacity- making it ideal for preparative-scale processing.

In addition, the Surface Enhanced Accessibility manufacturing process creates a porous structure that ensures maximum transfer speeds for solutes between the stationary and mobile phases-resulting in higher separation efficiency.

Our "Ultra-Fast" Europa columns are made in 3-5 cm length in order to get quick analytical results, whereas the "High Efficiency" columns are normally in 15-25 cm lengths to obtain best resolution.

Purity of silica

The responsibility for chromatographic separation of peptides and proteins is found inside the particle-within the pores. To obtain a very homogeneous pore distribution the least possible number of nanopores is essential.

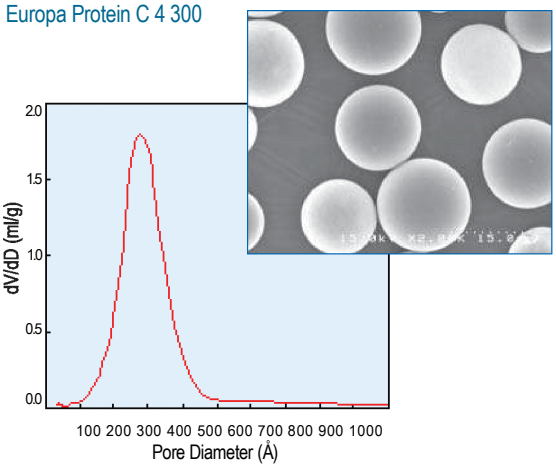
For most reverse-phase silica packings, these nanopores are not properly chemically bonded, endcapped or deactivated. So when nanopores are accessible to the peptides and proteins, surface-peptide and protein interactions frequently dominate. These interactions often result in a decrease of column efficiency.

The Teknokroma Europa Columns are uniquely designed with optimized pore size distribution; 120Å for Peptide and 300Å for the Protein Columns.

Europa HPLC Column for Peptides and Proteins

Europa protein C 4 Morphology and Pore Distribution

Europa Protein C 4 300



Deactivation Process

Thanks to our propietary new Multifunctional Endcapping Deactivation (MED) technology used with our popular HPLC columns mediterranea Sea 18, we obtain with the Europa packing a specially designed C 18 ligand confi guration, that blocks practically all the active centres that may have remained on the surface of the silica after bonding the C 18 chains.

As a result of this, Europa columns have an unusual low level of silanol activity, helping you to obtain symetrical peaks for the most basic and acidic compounds. The improved high density bonding and full endcapping make them suitable to separate or purify low molecular weight compounds (especially small peptides when using Europa Peptide column 120 Å) and separate or purify high molecular weight compounds, especially proteins when using Europa Protein column 300 Å.

Europa C 18 bonding chemistries will help you to achieve an extraordinary resistance and column lifetime when running at extreme pH levels.

Wide pH Range

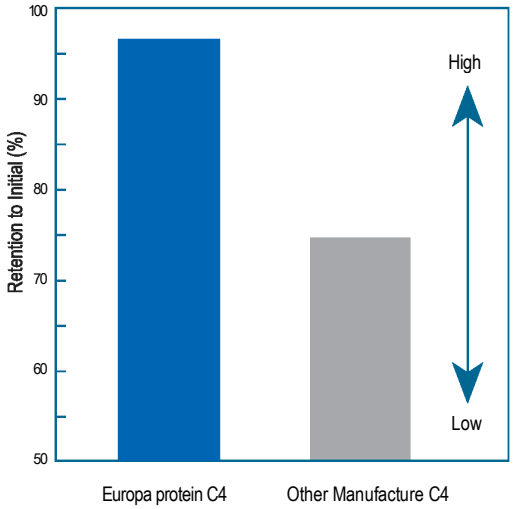
Using Europa C 18 packing materials it is possible to work with eluents from pH 1 to pH 12. Such unusual pH resistance values have been achieved as a result of phase bonding effi ciency and a propietary endcapping process which provides a protective shield against acidic and basic eluents.

Europa columns ensure greater separation effi ciency, resistance to extreme pH conditions and can be used for an extended period of time.

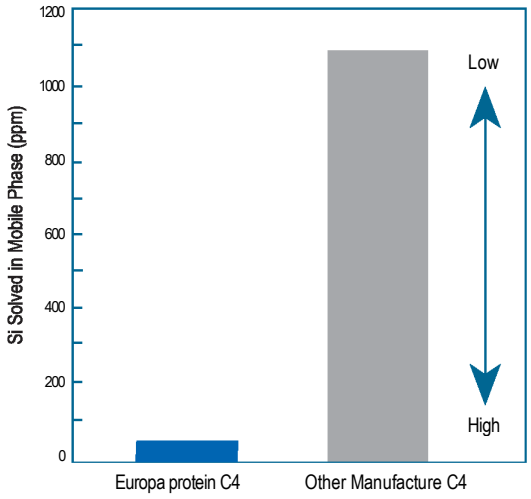
Phase stability of Europa Protein C4 columns has been checked purging one 25 x 0.78 cm column either with CH3CN/1%TFA 10:90 (pH=1)during 15 hours at 0.9 ml/min or with CH3CN/20 mM Na3PO4 10:90 (pH=12) during 3 hours at 1.7 ml/min.

Europa protein C 4 Phase Stability

Acid Resistance pH=1



Alkalil Resistance pH=12

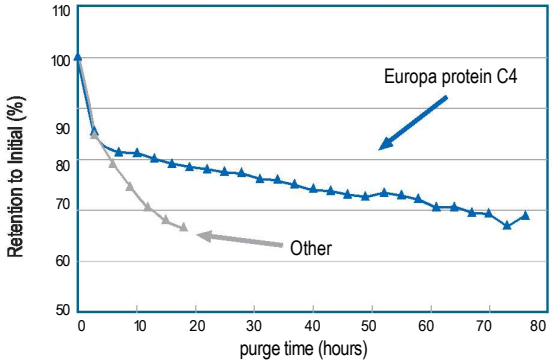


The graphic above shows the durability of the column after more than 80 hours of purge time passing through one Europa Protein C4 column a fl ow rate of 1.0 ml of alkaline solution at pH 12, CH3CN/0.01 NaOH 10/90 .

There is represented in the graphic the retention time of naftalene after every three hours of purge, using CH3CN / H2O 35:65 at 1.7 ml/min and 40ºC (UV detection at 254 nm). It is seen that after 80 hours, Europa columns still perform very well.

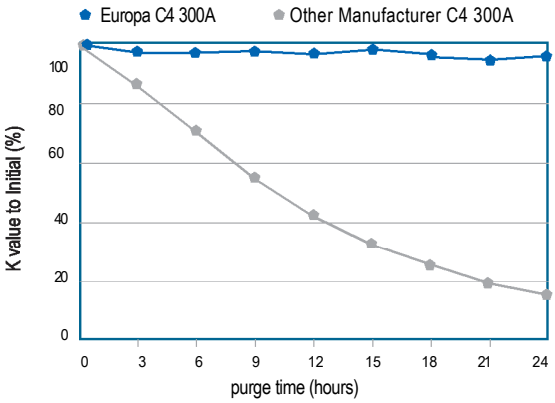
Europa HPLC Column for Peptides and Proteins

Durability comparison in Alkaline Medium/RT



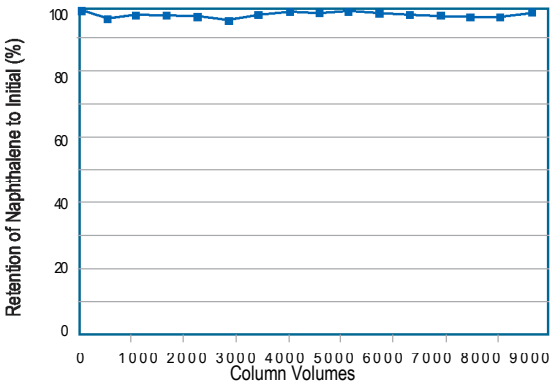
Durability of Europa C4 has also been compare against other manufacturers using a 15 x 0.46 cm column and CH3CN / 1.0% TFA in water 10:90 (pH=1) at 70ºC, and checking K values for naftalene every 3 hours.

Durability comparison in Acidic Medium / K value



Retention time for naftalene using the same chromatographic conditions has also been controlled after up to 9000 column volumes of CH3CN / 0.05% TFA in water (pH=2) at a fl ow rate of 1.0 ml/min at room temperature. Column size was 15 x 0.46 cm

Durability under Acidic Contition



Europa packaging

Europa C 18 Peptide HPLC columns

We invite you to try our Europa C18 peptide column when you experience unsatisfactory results with your favorite column.

Europa C18 Peptide columns are suitable to separate or purify low molecular weight compounds, especially small peptides.

Europa HPLC columns for peptides provide a high performance that is unsurpassed in effi ciency, reliability and reproducibility. Manufactured using novel proprietary technologies, analytical and preparative Europa columns are simply the best reverse phase columns available today. Europa columns ensure greater separation effi ciency, resistance to extreme pH conditions and longer column life.

Our “Ultra-Fast” columns are made in 3-5 cm length in order to get quick analytical results, whereas the “High Effi ciency” columns are normally in 15-25cm lengths to obtain the best resolution.

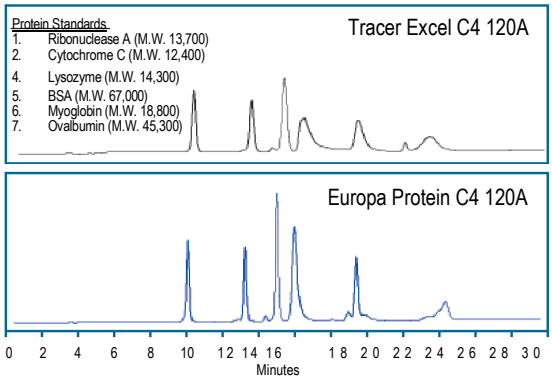
Europa HPLC Column for Peptides and Proteins

Specifi cations:

- Ultra high purity, totally spherical silica gel
- High density bonding for extreme performance proprietary fully end-capped silica
- Porous Size: 120 Å, narrow particle size distribution
- Surface Area m2/g 300
- % of Carbon 19 %
- High loading capacity of crude peptides
- Stable under basic and extreme acidic conditions
- Packed with 5µm sized silica particles

Microbore Columns are available in: 0.21, 0.30 cm ID
Analytical Columns are available in: 0.40 and 0.46 cm I.D
Semi-Prep Columns are available in: 0.8 and 1.0 cm
Prep Columns are available in: 2.1 cm
Larger diameter available by request

Infl uence of Pore size in Peak Shape



Column: 6 mm I.D. x 250 mm Length; Temperature: 35ºC; Detector: UV 220 nm; Mobile Phase: A) CH3CN/H2O/TFA = 20/80/0.1, B) CH3CN/H2O/TFA = 60/40/0.1, Linear Gradient from A to B in 25 min and hold for 10 min; Flow Rate: 1.7 ml/min.

Europa C 18 Peptide Analytical HPLC Colums

Cat.No	Description	Size
TR-010116	Europa C 18 Peptide Analytical	5 µm 3 x 0.46 cm
TR-010117	Europa C 18 Peptide Analytical	5 µm 4 x 0.46 cm
TR-010118	Europa C 18 Peptide Analytical	5 µm 5 x 0.46 cm
TR-010119	Europa C 18 Peptide Analytical	5 µm 10 x 0.46 cm
TR-010120	Europa C 18 Peptide Analytical	5 µm 15 x 0.46 cm
TR-010121	Europa C 18 Peptide Analytical	5 µm 20 x 0.46 cm
TR-010122	Europa C 18 Peptide Analytical	5 µm 25 x 0.46 cm
TR-010123	Europa C 18 Peptide Analytical	5 µm 3 x 0.40 cm
TR-010124	Europa C 18 Peptide Analytical	5 µm 4 x 0.40 cm
TR-010125	Europa C 18 Peptide Analytical	5 µm 5 x 0.40 cm
TR-010126	Europa C 18 Peptide Analytical	5 µm 10 x 0.40 cm
TR-010127	Europa C 18 Peptide Analytical	5 µm 15 x 0.40 cm
TR-010128	Europa C 18 Peptide Analytical	5 µm 20 x 0.40 cm
TR-010129	Europa C 18 Peptide Analytical	5 µm 25 x 0.40 cm

Europa C 18 Peptide Microbore HPLC Colums

Columns are particularly designed for LC/MS applications. The high detection sensitivity of these columns allows the use of smaller quantities of samples and also decreases the required volume of solvents.

Cat.No	Description	Size
TR-010130	Europa C 18 Peptide Microbore	5 µm 3 x 0.21 cm
TR-010131	Europa C 18 Peptide Microbore	5 µm 5 x 0.21 cm
TR-010132	Europa C 18 Peptide Microbore	5 µm 10 x 0.21 cm
TR-010133	Europa C 18 Peptide Microbore	5 µm 15 x 0.21 cm
TR-010134	Europa C 18 Peptide Microbore	5 µm 20 x 0.21 cm
TR-010135	Europa C 18 Peptide Microbore	5 µm 3 x 0.30 cm
TR-010136	Europa C 18 Peptide Microbore	5 µm 5 x 0.30 cm
TR-010137	Europa C 18 Peptide Microbore	5 µm 10 x 0.30 cm
TR-010138	Europa C 18 Peptide Microbore	5 µm 15 x 0.30 cm
TR-010139	Europa C 18 Peptide Microbore	5 µm 20 x 0.30 cm
TR-010140	Europa C 18 Peptide Microbore	5 µm 25 x 0.30 cm

Europa C 18 Peptide Semi Preparative HPLC Colums

Cat.No	Description	Size
TR-010141	Europa C 18 Peptide Semi-Preparative	5 µm 10 x 0.70 cm
TR-010142	Europa C 18 Peptide Semi-Preparative	5 µm 15 x 0.70 cm
TR-010143	Europa C 18 Peptide Semi-Preparative	5 µm 25 x 0.70 cm
TR-010144	Europa C 18 Peptide Semi-Preparative	5 µm 10 x 1.00 cm
TR-010145	Europa C 18 Peptide Semi-Preparative	5 µm 15 x 1.00 cm
TR-010146	Europa C 18 Peptide Semi-Preparative	5 µm 25 x 1.00 cm

Europa C 18 Peptide Preparative HPLC Colums

Cat.No	Description	Size
TR-010147	Europa C 18 Peptide Preparative	5 µm 5 x 2.12 cm
TR-010148	Europa C 18 Peptide Preparative	5 µm 10 x 2.12 cm
TR-010149	Europa C 18 Peptide Preparative	5 µm 15 x 2.12 cm
TR-010150	Europa C 18 Peptide Preparative	5 µm 25 x 2.12 cm

Europa HPLC Column for Peptides and Proteins

Europa C 18 Protein HPLC Columns

We invite you to try our Europa C 18 Protein column when you experience unsatisfactory results with your favorite column.

Europa C 18 Protein columns are designed and manufactured for identifi cation and purifi cation of proteins and for compounds with high molecular weight.

Europa HPLC columns for proteins provide a high performance that is unsurpassed in effi ciency, reliability and reproducibility. Manufactured using novel proprietary technologies, analytical and preparative Europa columns are simply the best reverse phase columns available today.
Europa columns ensure greater separation effi ciency, resistance to extreme pH conditions and longer column life.

Our “Ultra-Fast” columns are made in 3-5 cm length in order to get quick analytical results, whereas the “High Effi ciency” columns are normally in 15-25 cm lengths to obtain best resolution.

All Teknokroma columns work with 0-100% organic, as well as aqueous mobile phases, without any limitations. Just select a column designated for your type of sample to achieve superior results.

Specifi cations:

- Ultra high purity totally spherical silica gel provide a high resolution and excellent peak shape
- High loading capacity of crude proteins
- High density bonding for extreme performance proprietary fully end-capped silica
- Stable, featuring extended acidic and basic conditions
- Silica properties: ultra pure and totally spherical narrow distribution range and high density
- Fully end-capped silica
- Porous Size: 300Å narrow particle size distribution
- Surface Area m2/g 100
- % of Carbon 7 %
- Packed with 5Nm sized silica particles
- Available as C4, C8, and C18 columns
- Microbore Columns are available in: 0.21, 0.30 cm I.D. Analytical Columns in: 0.40 and 0.46cm I.D. Semi-Prep in: 0.70-1.0cm Prep Columns in: 2.1cm and larger diameter by request

Europa C 18 Protein Preparative HPLC Colums

Cat.No	Description	Size
TR-010217	Europa C 18 Protein Preparative	5 Nm 5 x 2.12 cm
TR-010218	Europa C 18 Protein Preparative	5 Nm 10 x 2.12 cm
TR-010219	Europa C 18 Protein Preparative	5 Nm 15 x 2.12 cm
TR-010220	Europa C 18 Protein Preparative	5 Nm 25 x 2.12 cm

Europa C 18 Protein Analytical HPLC Colums

Cat.No	Description	Size
TR-010158	Europa C 18 Protein Analytical	5 Nm 3 x 0.46 cm
TR-010159	Europa C 18 Protein Analytical	5 Nm 4 x 0.46 cm
TR-010160	Europa C 18 Protein Analytical	5 Nm 5 x 0.46 cm
TR-010161	Europa C 18 Protein Analytical	5 Nm 10 x 0.46 cm
TR-010162	Europa C 18 Protein Analytical	5 Nm 15 x 0.46 cm
TR-010163	Europa C 18 Protein Analytical	5 Nm 20 x 0.46 cm
TR-010164	Europa C 18 Protein Analytical	5 Nm 25 x 0.46 cm
TR-010172	Europa C 18 Protein Analytical	5 Nm 3 x 0.40 cm
TR-010173	Europa C 18 Protein Analytical	5 Nm 4 x 0.40 cm
TR-010174	Europa C 18 Protein Analytical	5 Nm 5 x 0.40 cm
TR-010175	Europa C 18 Protein Analytical	5 Nm 10 x 0.40 cm
TR-010176	Europa C 18 Protein Analytical	5 Nm 15 x 0.40 cm
TR-010177	Europa C 18 Protein Analytical	5 Nm 20 x 0,40 cm
TR-010178	Europa C 18 Protein Analytical	5 Nm 25 x 0.40 cm

Europa C 18 Protein Microbore HPLC Colums

Columns are particularly designed for LC/MS applications.
The high detection sensitivity of these columns allows the use of smaller quantities of samples and also decreases the required volume of solvents.

Cat.No	Description	Size
TR-010184	Europa C 18 Protein Microbore	5 Nm 3 x 0.21 cm
TR-010185	Europa C 18 Protein Microbore	5 Nm 5 x 0.21 cm
TR-010186	Europa C 18 Protein Microbore	5 Nm 10 x 0.21 cm
TR-010187	Europa C 18 Protein Microbore	5 Nm 15 x 0.21 cm
TR-010188	Europa C 18 Protein Microbore	5 Nm 20 x 0.21 cm
TR-010195	Europa C 18 Protein Microbore	5 Nm 3 x 0.30 cm
TR-010196	Europa C 18 Protein Microbore	5 Nm 5 x 0.30 cm
TR-010197	Europa C 18 Protein Microbore	5 Nm 10 x 0.30 cm
TR-010198	Europa C 18 Protein Microbore	5 Nm 15 x 0.30 cm
TR-010199	Europa C 18 Protein Microbore	5 Nm 20 x 0.30 cm
TR-010200	Europa C 18 Protein Microbore	5 Nm 25 x 0.30 cm

Europa C 18 Protein Semi-Preparative HPLC Colums

Cat.No	Description	Size
TR-010211	Europa C 18 Protein Semi-Preparative	5 Nm 10 x 0.70 cm
TR-010212	Europa C 18 Protein Semi-Preparative	5 Nm 15 x 0.70 cm
TR-010213	Europa C 18 Protein Semi-Preparative	5 Nm 25 x 0.70 cm
TR-010214	Europa C 18 Protein Semi-Preparative	5 Nm 10 x 1.0 cm
TR-010215	Europa C 18 Protein Semi-Preparative	5 Nm 15 x 1.0 cm
TR-010216	Europa C 18 Protein Semi-Preparative	5 Nm 25 x 1.0 cm

Europa HPLC Column for Peptides and Proteins

Semi preparative and Preparative Europa HPLC Columns

Europa C 8 Protein HPLC Columns

Europa C 8 columns are recommended for compounds too strongly retained on C 18 Phases.

Europa C 8 Protein Analytical HPLC Colums

Cat.No	Description	Size
TR-010151	Europa C 8 Protein Analytical	5 µm 3 x 0.46 cm
TR-010152	Europa C 8 Protein Analytical	5 µm 4 0.46 cm
TR-010153	Europa C 8 Protein Analytical	5 µm 5 x 0.46 cm
TR-010154	Europa C 8 Protein Analytical	5 µm 10 x 0.46 cm
TR-010155	Europa C 8 Protein Analytical	5 µm 15 x 0.46cm
TR-010156	Europa C 8 Protein Analytical	5 µm 20 x 0,46 cm
TR-010157	Europa C 8 Protein Analytical	5 µm 25 x 0.46 cm
TR-010165	Europa C 8 Protein Analytical	5 µm 3 x 0.40 cm
TR-010166	Europa C 8 Protein Analytical	5 µm 4 0.40 cm
TR-010167	Europa C 8 Protein Analytical	5 µm 5 x 0.40 cm
TR-010168	Europa C 8 Protein Analytical	5 µm 10 x 0.40 cm
TR-010169	Europa C 8 Protein Analytical	5 µm 15 x 0.40 cm
TR-010170	Europa C 8 Protein Analytical	5 µm 20 x 0,40 cm
TR-010171	Europa C 8 Protein Analytical	5 µm 25 x 0.40 cm

Europa C 8 Protein Microbore HPLC Colums

Columns are particularly designed for LC/MS applications.
The high detection sensitivity of these columns allows the use of smaller quantities of samples and also decreases the required volume of solvents.

Europa C 8 columns are recommended for compounds too strongly retained on C 18 Phases.

Cat.No	Description	Size
TR-010179	Europa C 8 Protein Microbore	5 µm 3 x 0.21 cm
TR-010180	Europa C 8 Protein Microbore	5 µm 5 x 0.21 cm
TR-010181	Europa C 8 Protein Microbore	5 µm 10 x 0.21 cm
TR-010182	Europa C 8 Protein Microbore	5 µm 15 x 0.21 cm
TR-010183	Europa C 8 Protein Microbore	5 µm 20 x 0.21 cm
TR-010189	Europa C 8 Protein Microbore	5 µm 3 x 0.30 cm
TR-010190	Europa C 8 Protein Microbore	5 µm 5 x 0.30 cm
TR-010191	Europa C 8 Protein Microbore	5 µm 10 x 0.30 cm
TR-010192	Europa C 8 Protein Microbore	5 µm 15 x 0.30 cm
TR-010193	Europa C 8 Protein Microbore	5 µm 20 x 0.30 cm
TR-010194	Europa C 8 Protein Microbore	5 µm 25 x 0.30 cm

Europa C 8 Protein Semi-Preparative HPLC Colums

Cat.No	Description	Size
TR-010201	Europa C 8 Protein Semi-Preparative	5 µm 10 x 0.70 cm
TR-010202	Europa C 8 Protein Semi-Preparative	5 µm 15 x 0.70 cm
TR-010203	Europa C 8 Protein Semi-Preparative	5 µm 25 x 0.70 cm
TR-010204	Europa C 8 Protein Semi-Preparative	5 µm 10 x 1.0 cm
TR-010205	Europa C 8 Protein Semi-Preparative	5 µm 15 x 1.0 cm
TR-010206	Europa C 8 Protein Semi-Preparative	5 µm 25 x 1.0 cm

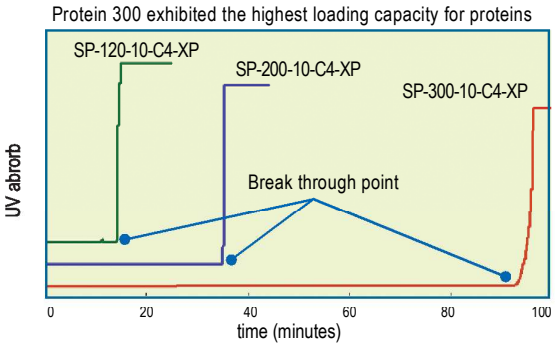
Europa C 8 Protein Preparative HPLC Colums

Cat.No	Description	Size
TR-010207	Europa C 8 Protein Preparative	5 µm 5 x 2.12 cm
TR-010208	Europa C 8 Protein Preparative	5 µm 10 x 2.12 cm
TR-010209	Europa C 8 Protein Preparative	5 µm 15 x 2.12 cm
TR-010210	Europa C 8 Protein Preparative	5 µm 25 x 2.12 cm

Europa HPLC Column for Peptides and Proteins

Europa C 4 Protein HPLC Columns

Europa Protein C 4 300 A - Loading Capacity of BSA

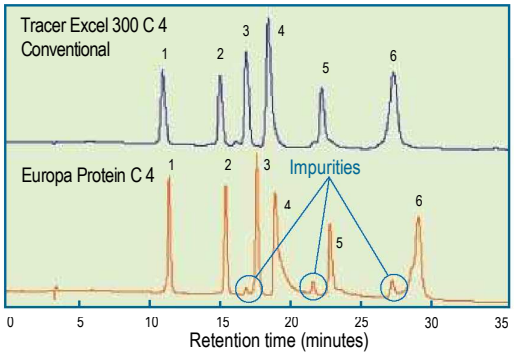


Column: 7 mm I.D. x 250 mm Length; Temperature: 35°C; Detector: UV 220 nm; Flow Rate: 1.0 ml/min.
Feed: 10 mg/mL BSA in 0.1% TFAaq
Europa C 4 columns are recommended for compounds too strongly retained on C 18 and C 8

Europa Protein C 4 300 A - Protein Separation

- Similar Hydrophobic Selectivity
- Higher Resolution

Protein Standards
1. Ribonuclease A (M.W. 13,700)
2. Cytochrome C (M.W. 12,400)
3. Lysozyme (M.W. 14,300)
4. BSA (M.W. 67,000)
5. Myoglobin (M.W. 18,800)
6. Ovalbumin (M.W. 45,300)



Column: 6 mm I.D. x 250 mm Length; Temperature: 35°C; Detector: UV 220 nm; Mobile Phase: A) CH3CN/H2O/TFA = 20/80/0.1, B) CH3CN/H2O/TFA = 60/40/0.1, Linear Gradient from A to B in 25 min and hold for 10 min; Flow Rate: 1.7 ml/min.

Europa C4 Protein Analytical HPLC Colums

TR-010082	Europa C 4 Protein Analytical	5 µm 4 x 0.46 cm
TR-010083	Europa C 4 Protein Analytical	5 µm 5 x 0.46 cm
TR-010084	Europa C 4 Protein Analytical	5 µm 10 x 0.46 cm
TR-010085	Europa C 4 Protein Analytical	5 µm 15 x 0.46 cm
TR-010086	Europa C 4 Protein Analytical	5 µm 20 x 0.46 cm

Cat.No	Description	Size
TR-010087	Europa C 4 Protein Analytical	5 µm 25 x 0.46 cm
TR-010088	Europa C 4 Protein Analytical	5 µm 3 x 0.40 cm
TR-010089	Europa C 4 Protein Analytical	5 µm 4 x 0.40 cm
TR-010090	Europa C 4 Protein Analytical	5 µm 5 x 0.40 cm
TR-010091	Europa C 4 Protein Analytical	5 µm 10 x 0.40 cm
TR-010092	Europa C 4 Protein Analytical	5 µm 15 x 0.40 cm
TR-010093	Europa C 4 Protein Analytical	5 µm 20 x 0.40 cm
TR-010094	Europa C 4 Protein Analytical	5 µm 25 x 0.40 cm

Europa C4 Protein Microbore HPLC Colums

Columns are particularly designed for LC/MS applications. The high detection sensitivity of these columns allows the use of smaller quantities of samples and also decreases the required volume of solvents.

Cat.No	Description	Size
TR-010095	Europa C 4 Protein Microbore	5 µm 3 x 0.21 cm
TR-010096	Europa C 4 Protein Microbore	5 µm 5 x 0.21 cm
TR-010097	Europa C 4 Protein Microbore	5 µm 10 x 0.21 cm
TR-010098	Europa C 4 Protein Microbore	5 µm 15 x 0.21 cm
TR-010099	Europa C 4 Protein Microbore	5 µm 20 x 0.21 cm
TR-010100	Europa C 4 Protein Microbore	5 µm 3 x 0.30 cm
TR-010101	Europa C 4 Protein Microbore	5 µm 5 x 0.30 cm
TR-010102	Europa C 4 Protein Microbore	5 µm 10 x 0.30 cm
TR-010103	Europa C 4 Protein Microbore	5 µm 15 x 0.30 cm
TR-010104	Europa C 4 Protein Microbore	5 µm 20 x 0.30 cm
TR-010105	Europa C 4 Protein Microbore	5 µm 25 x 0.30 cm

Europa C4 Protein Semi-Preparative HPLC Colums

Cat.No	Description	Size
TR-010106	Europa C 4 Protein Semi-Preparative	5 µm 10 x 0.70 cm
TR-010107	Europa C 4 Protein Semi-Preparative	5 µm 15 x 0.70 cm
TR-010108	Europa C 4 Protein Semi-Preparative	5 µm 25 x 0.70 cm
TR-010109	Europa C 4 Protein Semi-Preparative	5 µm 10 x 1.00 cm
TR-010110	Europa C 4 Protein Semi-Preparative	5 µm 15 x 1.00 cm
TR-010111	Europa C 4 Protein Semi-Preparative	5 µm 25 x 1.00 cm

Europa C4 Protein Preparative HPLC Colums

Cat.No	Description	Size
TR-010112	Europa C 4 Protein Preparative	5 µm 5 x 2.12 cm
TR-010113	Europa C 4 Protein Preparative	5 µm 10 x 2.12 cm
TR-010114	Europa C 4 Protein Preparative	5 µm 15 x 2.12 cm
TR-010115	Europa C 4 Protein Preparative	5 µm 25 x 2.12 cm

Mediterranea Sea18 New Generation HPLC Column

mediterranea sea 18
by Teknokroma

Introduction

The mediterranea sea18 column provides a performance level that, until now, has not been reached in effi ciency, inertness, pH-robustness, reproducibility and reliability. mediterranea sea18 columns simplify and make your HPLC work more pleasant. You won't worry about the extreme basic or acidic natures of your samples with the mediterranea sea18 column.

The versatility of the mediterranea sea18 column will enable you to deal successfully with the immense variety of separations in the fi elds of pharmaceuticals, life sciences, environment, foods, etc.

Once every ten years, the world of chromatography experiences a revolutionary technology that surpasses all others and meets the expectations of chromatographic scientists.

Teknokroma has focused all its efforts and all its know-how, accumulated through more than 25 years of chromatographic research and development, in offering the global-best reverse phase HPLC packing mediterranea sea1 8.

While developing the mediterranea sea18 column we created two novel proprietary bonding & packing technologies. In order to demonstrate the global-best technology of mediterranea sea1 8, we compared chromatographic results from the world's most popular reverse-phase HPLC columns. We invite you to try our mediterranea sea18 when you experience less-than-satisfactory results with your favourite column.

Today there is still a consensus about the fact that the best material to use as chromatographic packing continues to be silica. The particles of this material are very physically resistant, enable multiple functions, present maximum levels of effi ciency and are also compatible with practically all solvents.

Teknokroma has been concentrated on obtaining the best silica particle in the market. The silica particle on which the mediterranea sea18 column is based is the result of an optimisation process in which, starting off from extremely pure materials with unusual low metal content, a perfectly spherical, rigid and inert particle has been obtained. Furthermore, the "porifi cation" process developed for these ends (Surface Enhanced Accessibility, SEA) has achieved a high surface without losing any of its properties of physical resistance while also showing a very high load capacity, ideal for preparatory scaled processes. Moreover, the obtained porous structure ensures the maximum transfer speed of the solutes between the stationary and mobile phases, resulting in a greater separation effi ciency.

Let us demonstrate the superior chromatographic properties of the mediterranea sea18 column, so you will feel comfortable with the performance of the world's best reverse-phase HPLC column.