# ANALYTICAL HPLC BIO-COLUMNS

Oligopeptides, Peptides & Proteins
Identification, Quantification & Purification
Ideal for Bio-Analysts

puriFlash<sup>®</sup> BIO puriFlash<sup>®</sup> CS Evolution Uptisphere<sup>®</sup> BIO



All of our Advion Interchim Scientific silicas puriFlash® CS Evolution, puriFlash® BIO, Uptisphere BIO follow rigorous and innovative manufacturing processes. Base silicas are produced in ceramic reactors from standard particles for purification or totally free of all traces of metals for analysis. Each of the different synthesis steps is strictly controlled.

This rigor leads to extremely mechanically stable particles. The particle size and porosity distributions as well as the specific surface areas are perfectly defined and reproducible.

Our puriFlash® Bio silicas are specifically designed to meet the requirements of preparative liquid chromatography. They combine quality and cost effectiveness.

### Our silicas have three major advantages:

#### 1. A perfect control of the surface state.

We physically or chemically modify the surface of the silica to choose the type, the amount of silanols or the overall surface energy according to the objective to be achieved.

#### 2. Cylindrical pores.

The quantity of free silanols and their excellent accessibility allows to obtain a homogeneous and particularly dense functionalization (grafting). This results in a very good loading capacity and a good stability of these stationary phases under aggressive mobile phase conditions such as basic buffers.

#### 3. High mechanical stability

Our stationary phases can withstand multiple packings and de-packings without damaging the integrity of the substrate. They are the tool of choice for preparative chromatography.

### **Modified silicas**

The Laboratoire d'Etude des Techniques et des Instruments d'Analyse Moléculaire (LETIAM), a constituent unit of the analytical chemistry group of Paris Sud located at the IUT of Orsay, played a fundamental role in our reflection which led to the development of our stationary phases.

The laboratory of Sciences and Separative Methods - (SMS) of the Institute of Research in Fine Organic Chemistry - (IRCOF) has concretized part of our ideas by developing innovative synthesis schemes for the modification of our «Core-Shell» silicas Uptisphere® CS Evolution.

Today, we offer a wide range of selectivities to meet the needs of analysts and chemists for the identification, quantification and purification of small organic molecules, peptides and proteins.

# SILICAS FOR (U)HPLC, PREP-LC & FLASH COLUMNS

## puriFlash® Bio

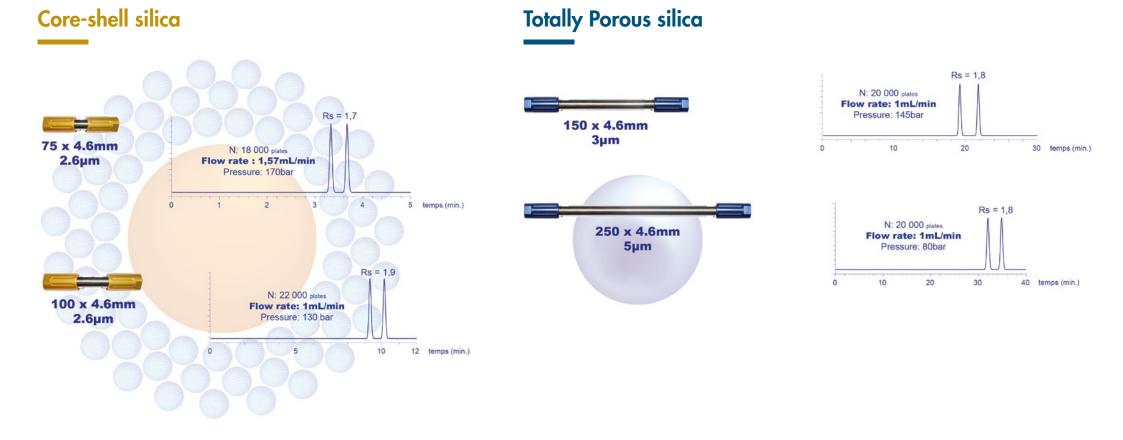
(U)HPLC, Analytical, prep LC & Flash columns for the identification, quantification & purification of Peptides, Polypeptides & Proteins at high & low pH.

### Uptisphere® Bio

X-serie™ - Uptisphere® 300Å - Uptisphere® TP HPLC & prep LC columns for the identification, quantification of Proteins, Peptides & Polypeptides at high & low pH.



## **TECHNICAL DATA**



## **TECHNICAL DATA**

High Performance Hardware<sup>™</sup>

- 1200 bar maximum pressure
- Used for HPLC & UHPLC columns
- High performance



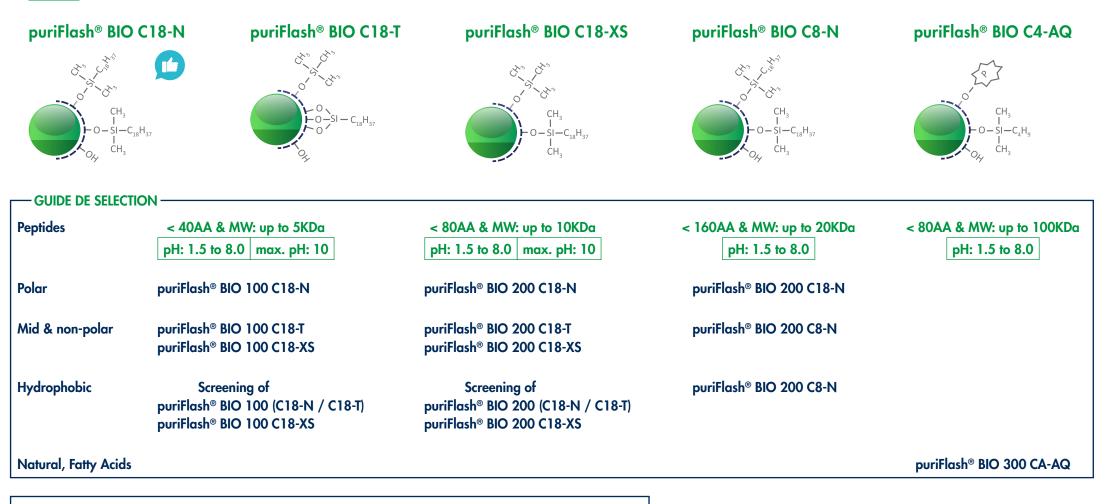
(2.1 - 3.0 - 4.0 - 4.6 - 10.0 - 21.2 - 30.0 - 50.8) mm x (25 - 50 - 100 - 125 - 150 - 250) mm Easy transfert from any columns to "ready-to-go" & secured Analytical, or Gradient Purification, Method



•900 bar maximum pressure		Low dead volume		gh performance	
Guard Holder P/N : AGHP-5					
Guard cartridge					
Wide Pore Guard cartridges	Reverse Phase	Hilic Mode	Normal Phase		
3 µm - 5 x 2.1 mm - 3u	UVV-RP-3-005/021				
3 µm - 5 x 4.0 mm - 3u	UVV-RP-3-005/046			-	
5 μm - 5 x 2.1 mm - 3υ	UVV-RP-5-005/021			-	
5 µm - 5 x 4.0 mm - 3u	UVV-RP-5-005/046			-	

# PURIFLASH<sup>®</sup> BIO - STATIONARY PHASES

### 2.5µm for In-Process QA/QC, Analysis - 5 & 10µm for Analysis -10 & 15µm for Purification by preparative LC - 15 & 30µm for Purification by flash

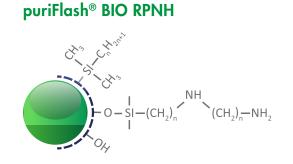


In-Process QA/QC of Peptides Synthesis puriFlash® BIO CS 2.6 C18-N => puriFlash® BIO 100 2.5 C18-N

# PURIFLASH<sup>®</sup> BIO - STATIONARY PHASES

Oligonucleotides < 25mer	PuriFlash® BIO 100 2.5-RPNH
Oligonucleotides < 40mer	PuriFlash® BIO 200 RPNH
Aptamers, DNA	PuriFlash® BIO 300 RPNH

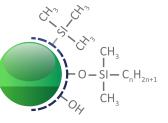


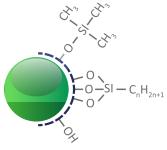




## puriFlash® BIO 200 45-RP

puriFlash® BIO 300 50-RPT





Desalting columns for Synthetic Peptides Host Cell Fishing

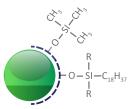
PuriFlash® BIO 200 45-RP PuriFlash® BIO 300 50-RPT

#### Notes:

Host Cell Fishing in process scale clarification of cell culture harvests. To remove both host cell protein and host cell DNA from bioprocessing streams containing recombinant monoclonal antibody.

# UPTISPHERE® BIO - STATIONARY PHASES

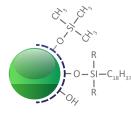
#### Uptisphere<sup>®</sup> BIO X-Series OD<sub>2</sub>



130Å - 300m²/g 3, 5 & 15μm Bonding: C18 %C: 20 End-capping: multi-step pH stability: 1.0 to 13.0

**BioDrugs with low molecular weight** 

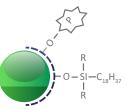
#### Uptisphere® BIO 300Å WOD



300Å - 100m²/g 3, 5 & 15µm Bonding: C18 %C: 10 End-capping: one-step pH stability: 1.5 to 7.0

Weakly hydrophobic peptides & oligopeptides up to 50 kD

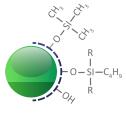
#### Uptisphere® BIO X-Series C18-AQ



220Å - 200m<sup>2</sup>/g 3, 5 & 15µm Bonding: C18 %C: 14 End-capping: mixte pH stability: 1.0 to 10.0

Mid-polar BioDrugs & Peptides with medium molecular weight. 100% water compatible

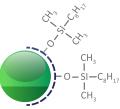
#### Uptisphere<sup>®</sup> BIO 300Å WC4



300Å - 100m²/g 3, 5 & 15 µm Bonding: C4 %C: 4 End-capping: one-step pH stability: 2.0 to 7.0

Hydrophobic proteines & polypeptides, 50 up to 150 kD

#### Uptisphere® BIO X-Series C8



220Å - 200m<sup>2</sup>/g 3, 5, 10 & 15µm Bonding: C8 %C: 8 End-capping: multi-step pH stability: 1.0 to 13.0

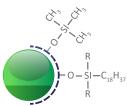
BioDrugs & Peptides with medium molecular weight



# DIRECT VYDAC ALTERNATIVE STATIONARY PHASES



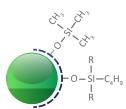




300Å - 100m<sup>2</sup>/g 3 & 5µm Bonding: C18 %C: 10 End-capping: mixte pH stability: 1.5 to 7.0

Weakly hydrophobic peptides & oligopeptides up to 50 kD

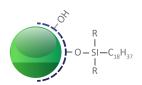
**TP14** 



300Å - 100m<sup>2</sup>/g 3 & 5µm Bonding: C4 %C: 4 End-capping: mixte pH stability: 2.0 to 7.0

Hydrophobic proteines & polypeptides, 50 up to 150 kD

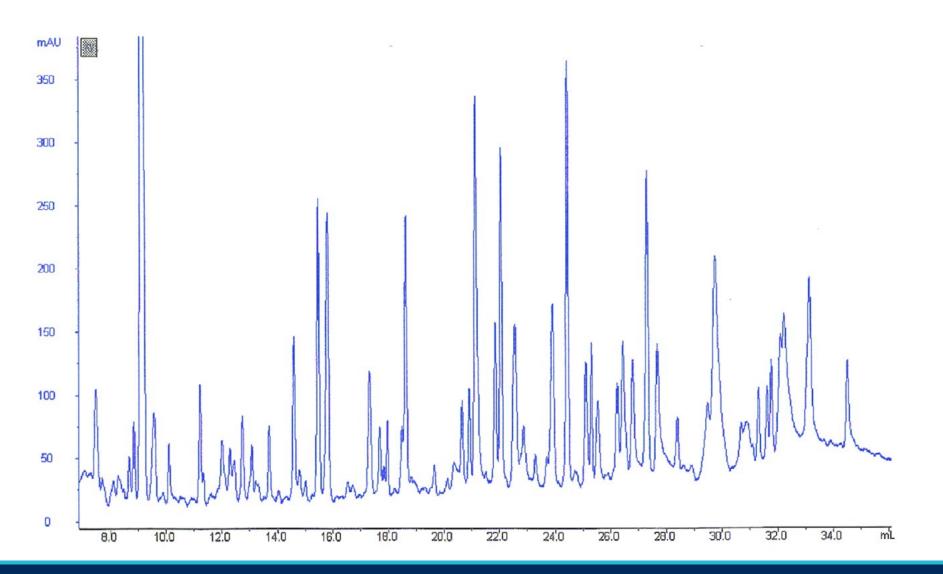
**TP01** 



300Å - 100m²/g 3 & 5µm Bonding: C18 %C: na End-capping: na pH stability: 1.5 to 7.5

PAH's Weakly hydrophobic peptides & oligopeptides up to 50 kD

# TRYPSIN MAPPING OF MONOCLONAL IGG WITH UP5WOD-250/030



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### How to request more information, a quotation or to place an order

Please see from the list below:

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