



## Stationary Phases & Columns

<b>Characteristics &amp; Selection Guide</b>	<b>C. 2 - C. 7</b>
Small Organics Molecules Analysis & Purification	C. 2 - C. 5
Oligonucleotides & Peptides Analysis & Purification	C. 6 - C. 7
<b>Stationary Phases</b>	<b>C. 8 - C. 13</b>
Normal Phases	C. 8
- puriFlash® IR-SI	C. 8
- puriFlash® SI-HP	C. 8
- puriFlash® SI-HC	C. 8
- puriFlash® SI-AgNO <sub>3</sub>	C. 8
- ALN - Neutral	C. 8
- ALB - Basique	C. 8
Reverse Phases	C. 9 - C. 10
- puriFlash® RP-AQ	C. 9
- puriFlash® C18-AQ	C. 9
- puriFlash® C18-HP	C. 9
- Uptisphere® Strategy™ C18-HQ	C. 9
- puriFlash® C18-XS	C. 9
- Uptisphere® Strategy™ PHC4	C. 10
Mixed (Normal/Reverse/HILIC/Ion Exchange) phases	C. 10 - C. 11
- puriFlash® CN	C. 10
- puriFlash® Diol	C. 10
- Uptisphere® Strategy™ HILIC-HIA	C. 10
- puriFlash® NH <sub>2</sub> -HC	C. 11
- puriFlash® NH <sub>2</sub>	C. 11
- puriFlash® MM1	C. 11
Ion Exchange	C. 11 - C. 12
- puriFlash® SCX	C. 11
- puriFlash® SAX	C. 12
Polymers	C. 12
- Ultra-Pur PSDVB (Atoll X)	C12
- Polyamide 6	C12
Chiral Phases	C. 13
- IA chiral	C. 13
- IC chiral	C. 13
- ID chiral	C. 13
- OD-I chiral	C. 13



<b>PuriFlash® Dry-Load</b>	<b>C. 14 - C. 15</b>		
- PuriFlash® Dry-Load	C. 14	- Uptisphere® Strategy™ HILIC-HIA	C. 26
- PuriFlash® HP Dry-Load	C. 15	- Uptisphere® Strategy™ SI	C. 27
		- Uptisphere® C18-NEC	C. 27
<b>PuriFlash® Columns</b>	<b>C. 16</b>	- Uptisphere® CN	C. 27
<b>Interchim® Pre-packed prep LC &amp; DAC columns</b>	<b>C. 17</b>	<b>BIO-Stationary Phases</b>	<b>C. 28 - C. 29</b>
<b>Columns List - Small Organics Purification</b>	<b>C. 18 - C. 27</b>	- Selection Guide	C. 28
- puriFlash® C18-STD	C. 18	- puriFlash® BIO C18-N	C. 29
- puriFlash® C18-XS	C. 18	- puriFlash® BIO C18-T	C. 29
- puriFlash® C18-HP	C. 18	- puriFlash® BIO C18-XS	C. 29
- puriFlash® C18-AQ	C. 19	- puriFlash® BIO C8-N	C. 29
- puriFlash® RP-AQ	C. 19	- puriFlash® BIO C4-AQ	C. 29
- puriFlash® MM1	C. 20	<b>Columns List - Peptides Purification</b>	<b>C. 30 - C. 35</b>
- puriFlash® CN	C. 20	- puriFlash® BIO 100 C18-N	C. 30
- puriFlash® DIOL	C. 20	- puriFlash® BIO 100 C18-T	C. 30
- puriFlash® IR-SI	C. 21	- puriFlash® BIO 100 C18-XS	C. 31
- puriFlash® SIHP	C. 21	- puriFlash® BIO 200 C18-N	C. 31
- puriFlash® SIHP - Jumbo pack	C. 22	- puriFlash® BIO 200 C18-T	C. 32
- puriFlash® SIHC	C. 22	- puriFlash® BIO 200 C18-XS	C. 32
- puriFlash® AGNO3	C. 22	- puriFlash® BIO 200 C8-N	C. 33
- puriFlash® NH2	C. 23	- puriFlash® BIO 300 C4-AQ	C. 33
- puriFlash® NH2HC	C. 23	- puriFlash® 200 C18-AQ	C. 34
- puriFlash® SCX	C. 23	- puriFlash® 200 C8	C. 34
- puriFlash® SAX	C. 23	- puriFlash® 200 C4	C. 34
- puriFlash® x (Pure PSDVB)	C. 23	- puriFlash® 300 C18	C. 34
- puriFlash® P6 (Polyamide 6)	C. 24	- puriFlash® 300 C4	C. 34
- puriFlash® ALUMINA N (Neutral Alumina)	C. 24	- Application Note	C. 35
- puriFlash® ALUMINA B (Basic Alumina)	C. 24	<b>Columns List - Oligonucleotides Purification</b>	<b>C. 36 - C. 37</b>
- puriFlash® ACTIVATED CARBON	C. 24	- puriFlash® BIO 200 RP-NH	C. 36
- puriFlash® Chiral IA	C. 24	- puriFlash® BIO 300 RP-NH	C. 37
- puriFlash® Chiral IC	C. 24	<b>Desalting &amp; Host Cell Fishing</b>	<b>C. 37</b>
- puriFlash® Chiral ID	C. 24	- puriFlash® BIO 200 45RP	C. 37
- puriFlash® Chiral OD-I	C. 24	- puriFlash® BIO 300 50RPT	C. 37
- Uptisphere® Strategy™ C18-3	C. 25	<b>Interchim® Peptides Monolith Columns</b>	<b>C. 38 - C. 41</b>
- Uptisphere® Strategy™ C18-HQ	C. 25	<b>Novel High-Performance Metal Scavenger</b>	<b>C. 42 - C. 45</b>
- Uptisphere® Strategy™ C18-RP	C. 25		
- Uptisphere® Strategy™ PHC4	C. 26		
- Uptisphere® Strategy™ HILIC-HIT	C. 26		



# Stationary Phases & Columns

## Characteristics & Selection Guide

Back to  
**SUMMARY**

Name	ITM Code	USP Code	Ø Pore	Surface	1.7	2.2	2.5	2.6	3	3.5	5	10	15	20	30	50	µm
<b>Small Organics molecules Analysis &amp; Purification</b>																	
puriFlash®	C18-XS	L1	100Å	300m²/g							x	x	x		x		
puriFlash®	C18-HP	L1	100Å	300m²/g							x	x	x		x	x	
puriFlash®	C18-AQ	L1	100Å	300m²/g							x	x	x		x		
puriFlash®	RP-AQ	L7	60Å	500m²/g									x		x		
puriFlash®	Diol	L20	60Å	500m²/g							(x)	x	x		x	x	
puriFlash®	SIHP	L3	60Å	500m²/g							x	x	x		x	x	
puriFlash®	NH₂	L8	100Å	300m²/g							x	x	x		x	x	
puriFlash®	IR-C18	L1	60Å	450m²/g												(x)	
puriFlash®	MM1	L44	100Å	400m²/g													x
puriFlash®	CN	L10	60Å	500m²/g									x			x	
puriFlash®	SIHC	L3	60Å	680m²/g									x		(x)	x	
puriFlash®	IR-SI	L3	60Å	450m²/g										(x)		(x)	
puriFlash®	SI-AGNO₃		60Å	500m²/g												x	
puriFlash®	NH₂HC	L8	60Å	680m²/g													x
puriFlash®	SCX	L50	100Å	400m²/g													x
puriFlash®	SAX	L14	60Å	500m²/g													x
puriFlash®	X		100Å	800m²/g													40
puriFlash®	P6		60Å														100
puriFlash®	ALN		60Å	200m²/g													32/63
puriFlash®	ALB		60Å	200m²/g													32/63
puriFlash®	AC																420/840



Greffage	Fonctionalisation	% Carbon	End-Capping	pH Stability	Use mode	Application
C18 - octadecyl	Mono-functional	17.0%	Multi-step	1.0 - 10.0	Reverse	The proprietary multi-step bonding technology guarantees a fully end-capped phase, stable under basic pH conditions up to pH: 10. It's an excellent phase for the integral purification of basic drugs.
C18 - octadecyl	Mono-functional	16.5%	One-step	1.5 - 7.5	Reverse	Serves many pharmaceutical applications. Excellent choice for routine purification in reverse phase mode.
C18 - octadecyl	Mono-functional	14.0%	Mixte	2.0 - 7.5	Reverse	The bonding chemistry allows to start gradient with 100% of water. Suitable for the purification of mid and non polar compounds.
RP-alkyl	Mono-functional	6.0%	Mixte	2.0 - 7.5	Reverse	The bonding chemistry allows to start gradient with 100% of water. Suitable for the purification of high and mid polar compounds. Compare to C18, peaks are eluted earlier from the beginning of the gradient.
Diol	Mono-functional		None	1.5 - 6.5	Normal	The diol fonction provides globally a neutral surface onto the silica. It leads to greater separation of basic compounds by normal phase vs. regular silica.
Silica, HP grade			None	1.5 - 6.5	Normal	Non-ionic, polar organic compounds.
NH2 - amino	Mono-functional	4.0%	One-step	2.0 - 6.5	Reverse / Normal / Ion Exchange	Can be either weak anion exchangers for strong acids, or polar media that can interact with OH, NH, SH ...
C18 - octadecyl	Mono-functional	20.0%	One-step	1.5 - 7.0	Reverse	Serves a broad-ship of purification requirements of non polar compounds.
RP/SCX	Mono-functional		One-step	1.0 - 7.5	Reverse / Ion Exchange	Ion exchange and hydrophobic chains are bonded onto the surface of silica providing unique selectivity. Compounds that possess basic functionality are retained by ion exchange functionality. Passing an organic solvent will elute hydrophobic compounds.
CN - cyano	Mono-functional	5.0%	One-step	1.5 - 7.5	Reverse / normal	CN functional groups can be used either in normal phase to purify polar compounds or in reversed phase for mid-polar compounds.
Silica, HC grade			None	1.5 - 6.5	Normal	Non-ionic, polar organic compounds.
Irregular silica			None	1.5 - 6.5	Normal	Non-ionic, polar organic compounds.
Silica, AgNO3 coated			None	1.5 - 6.5		purification of stereo-isomers compounds.
NH2 - amino	Poly-functional	4.0%	None	1.5 - 6.5	Reverse / Normal / Ion Exchange	Can be either weak anion exchangers for strong acids, or polar media that can interact with OH, NH, SH ...
Strong Cation Exchanger	Mono-functional		None	1.0 - 7.5	Ion Exchange	Strong cation exchange (SCX) contains sulfonic acid used to purify weak basic compounds which have one or more positive charges.
Strong Anion Exchanger	Mono-functional		None	1.0 - 7.5	Ion Exchange	Strong anion exchange (SAX) contains quaternary amine used to purify weak acid compounds which have one or more negative charges.
PSDVB			None	1.0 - 13	Reverse	Universal polymer with high surface area designed to purify a broad range of hydrophobic compounds through a variety of matrices in a pH range from 1 to 14.
Polyamide-6			None			Exhibits a constant selectivity toward flavones, chalkones, anthraquinones, aromatic nitro compounds, DNP amino acids, phenols, carbonic acids, acid amides, sulphonic acids and amides of sulphonic acids as well as towards amines and quinones.
Activated, Neutral Alumina			None			Natural products , Essential oils, Antibiotics, Vitamins, Alkaloids, ...
Activated, Basic Alumina			None			Plant extraction, organic solvent purification, Alkaloids,...
Activated Carbon			None			Décolorization.



# Stationary Phases & Columns

## Characteristics & Selection Guide

Back to  
**SUMMARY**

Name	ITM Code	USP Code	Ø Pore	Surface	1.7	2.2	2.5	2.6	3	3.5	5	10	15	20	30	50	µm
<b>Small Organics molecules Analysis &amp; Purification (suite)</b>																	
Uptisphere® Strategy™	C18-3	L1	100Å	425m²/g					x		x	x	x				
Uptisphere® Strategy™	C18-HQ	L1	100Å	425m²/g	x	x			x		x	x	x				
Uptisphere® Strategy™	C18-RP	L1	100Å	425m²/g		x			x		x	x	x				
Uptisphere® Strategy™	PHC4	L11	100Å	300m²/g		x			x		x	x	x				
Uptisphere® Strategy™	HIT hilic	L3	100Å	425m²/g		x			x		x	x	x				
Uptisphere® Strategy™	HIA hilic		100Å	300m²/g		x			x		x	x	x				
Uptisphere® Strategy™	SI	L3	100Å	425m²/g		x			x		x	x					
Uptisphere®	C18-NEC	L1	120Å	320m²/g		x			x		x	x	x				
Uptisphere®	CN	L10	120Å	320m²/g					x		x	x	x				
Daicel®	IA																20
Daicel®	IC																20
Daicel®	ID																20
Daicel®	OD-I																20





Greffage	Fonctionnalisation	% Carbon	End-Capping	pH Stability	Use mode	Application
C18 - octadecyl	Mono-fonctionnel	22.0%	Multi-step	1.0 - 12	Reverse	The high bonding density of C18-3 facilitates a strong separation of non polar compounds. Multi-step bonding technology guarantees a fully end-capped phase, stable under basic pH conditions. C18-3 is an excellent phase for the separation of basic drugs at up to pH : 12.
C18 - octadecyl	Mono-fonctionnel	19.0%	Multi-step	1.0 - 10	Reverse	This utility phase serves many pharmaceutical applications. Its 425 m <sup>2</sup> /g surface area is providing excellent loading capacity.
C18 - octadecyl	Mono-fonctionnel	16.0%	Multi-step Mixte	1.5 - 8.0	Reverse	Suitable for mid & non polar compounds separation. RP shows excellent mechanical stability that makes it an excellent tool for purification under acidic or basic conditions.
Phenyl - Butyl	Mono-fonctionnel	12.0	One-step	1.5 - 7.5	Reverse	Very selective for compounds with aromatic cycles and mid-polar compounds.
Proprietary	Proprietary		Proprietary	1.5 - 7.0	Hilic	Aqueous normal phase separation (ANP) of water-soluble compounds. Typical mobile phase: water / ACN (> 70%). ANP is an excellent alternative to RP purification for highly polar compounds.
Proprietary	Proprietary		Proprietary	2.0 - 7.0	Hilic	Aqueous normal phase separation (ANP) of water-soluble compounds. Typical mobile phase: water / ACN (> 70%). ANP is an excellent alternative to RP purification for highly polar compounds.
Ultra pure silica			None	1.5 - 7.0	Normal	Non-ionic, polar organic compounds.
C18 - octadecyl	Mono-fonctionnel	16.0%	None	1.5 - 6.5	Reverse	NEC strongly retains the polar and mid-polar compounds. It overcomes peak tailing with compounds that contain chains and / or carbon cycles combined with numerous polar groups and/or basic in character.
CN - cyano	Mono-fonctionnel	8.0%	One-step	2.0 - 7.0	Reverse / Normal	CN functional groups can be used either in normal phase to purify polar compounds or in reversed phase for mid-polar compounds.
Amylose tris (3,5-dimethylphenylcarbamate)			None			Chiral compounds by normal & reversed phase such as Bupivacaine, Indapamide, suproferm, ...
Cellulose tris (3,5-dichlorophenylcarbamate)			None			Chiral compounds by normal & reversed phase such as Econazole, Indoprofen, 5-Fluoro-1 (tetrahydro-2-furyl) uracil ...
Amylose Tris (3-Chlorophenylcarbamate)			None			Chiral compounds by normal & reversed phase such as (±)-Hydrobenzoin, Sulconazole, Tropic acid, ...
Cellulose tris (3,5-dimethylphenylcarbamate)			None			Chiral compounds by normal & reversed phase such as 2-Bromomethyl-1,4-benzodioxane, pindolol, Troger's Base, ...



# Stationary Phases & Columns

## Characteristics & Selection Guide

Back to  
**SUMMARY**

Name	ITM Code	USP Code	Ø Pore	Surface	1.7	2.2	2.5	2.6	3	3.5	5	10	15	20	30	50	µm
<b>Oligonucleotides &amp; Peptides Analysis &amp; Purification</b>																	
puriFlash® Bio CS Evolution™	C18-N	L1	85Å	130m²/g				x									
puriFlash® Bio 100	C18-N	L1	100Å	320m²/g		x				x	x	x	x			x	
puriFlash® Bio 100	C18-T	L1	100Å	320m²/g		x				x	x	x	x			x	
puriFlash® Bio 100	C18-XS	L1	100Å	320m²/g		x				x	x	x	x			x	
puriFlash® Bio 200	C18-N	L1	200Å	200m²/g		x				x	x	x	x			x	
puriFlash® Bio 200	C18-T	L1	200Å	200m²/g		x				x	x	x	x			x	
puriFlash® Bio 200	C18-XS	L1	200Å	200m²/g		x				x	x	x	x			x	
puriFlash® Bio 200	C8-N	L7	200Å	200m²/g		x				x	x	x	x			x	
puriFlash® Bio 300	C4-AQ	L26	300Å	100m²/g						x	x	x	x			x	
puriFlash® Bio 100	RPNH		100Å	320m²/g		x											
puriFlash® Bio 200	RPNH		200Å	200m²/g						x	x	x	x			x	
puriFlash® Bio 300	RPNH		300Å	100m²/g						x	x	x	x			x	
puriFlash® Bio 200	RP		200Å	200m²/g													45
puriFlash® Bio 300	RPT		300Å	100m²/g												x	
puriFlash® PT	C18-AQ	L1	200Å	150m²/g									x				
puriFlash® PT	C8	L7	200Å	150m²/g									x				
puriFlash® PT	C4	L26	200Å	150m²/g									x				
puriFlash® PP	C18	L1	300Å	100m²/g									x				
puriFlash® PP	C4	L26	300Å	100m²/g									x				



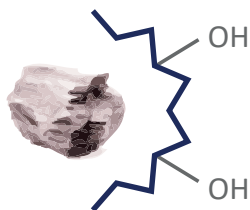


Greffage	Fonctionnalisation	% Carbon	End-Capping	pH Stability	Use mode	Application
C18 - octadecyl	Mono-fonctional		None	1.5 - 7.0	Reverse	In-Process QA/QC of Peptides synthesis.
C18 - octadecyl	Mono-fonctional	15.5%	None	1.5 - 8.0	Reverse	In-Process QA/QC of Peptides Synthesis. Analysis & Purification of polar Peptides with less than 40AA & mw. up to 5KDa under pseudo hilic mode with 85% -to- 95% ACN. Analysis & Purification of hydrophobic Peptides with less than 40AA & mw. up to 5KDa.
C18 - octadecyl	Tri-fonctional	17.0%	One-step	1.5 - 8.0	Reverse	Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa.
C18 - octadecyl	Mono-fonctional	17.0%	Multi-step	1.0 - 10.0	Reverse	Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa under basic conditions up to pH: 10.0.
C18 - octadecyl	Mono-fonctional	7.0%	None	1.5 - 8.0	Reverse	Analysis & Purification of polar Peptides less than 160AA & mw. up to 20KDa under pseudo hilic mode with 85% -to- 95% ACN. Analysis & Purification of hydrophobic Peptides with less than 80AA & mw. up to 10KDa.
C18 - octadecyl	Tri-fonctional	11.0%	One-step	1.5 - 8.0	Reverse	Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 80AA & mw. up to 10KDa.
C18 - octadecyl	Mono-fonctional	11.0%	Multi-step	1.0 - 10.0	Reverse	Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 80AA & mw. up to 10KDa under basic conditions up to pH: 10.0.
C8 - octyl	Mono-fonctional	5.0%	None	1.5 - 8.0	Reverse	Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 160AA & mw. up to 20KDa.
C4 - butyl	Mono-fonctional	3.0%	Mixte	1.5 - 8.0	Reverse	Analysis & Purification of natural Peptides, fatty acids larger than 80AA & mw. up to 100KDa.
RP - Alkyl chain / Amines	Mono-fonctional	4.0%	None	1.5 - 8.0	Reverse / Ion Exchange	Ultra fast & efficient analysis of oligonucleotides up to 25 mer.
RP - Alkyl chain / Amines	Mono-fonctional	4.0%	None	1.5 - 8.0	Reverse / Ion Exchange	Analysis & Purification of oligonucleotides up to 40 mer.
RP - Alkyl chain / Amines	Mono-fonctional	2.0%	None	1.5 - 8.0	Reverse / Ion Exchange	Analysis & Purification of large oligos, aptamers, DNA.
RP - Alkyl chain	Mono-fonctional	5.0%	Mixte	1.5 - 8.0	Reverse	Desalting columns for Synthetic Peptides.
RP - Alkyl chain	Tri-fonctional	3.0%	One-step	1.5 - 8.0	Reverse	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.
C18 - octadecyl	Mono-fonctional	12.0%	Mixte	1.5 - 8	Reverse	mid-polar BioDrugs & Peptides with medium molecular weight. 100% water compatible.
C8 - octyl	Mono-fonctional	5.0%	One-step	1.5 - 8	Reverse	BioDrugs & Peptides with medium molecular weight.
C4 - butyl	Mono-fonctional	3.0%	One-step	1.5 - 8	Reverse	BioDrugs & Peptides with high molecular weight.
C18 - octadecyl	Mono-fonctional	10.0%	One-step	1.5 - 8	Reverse	Weakly hydrophobic peptides & oligopeptides up to 50 kD.
C4 - butyl	Mono-fonctional	3.0%	One-step	1.5 - 8	Reverse	Hydrophobic proteinés & polypeptides, 50 up to 150 kD.



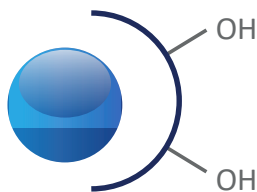


### Normal Phase



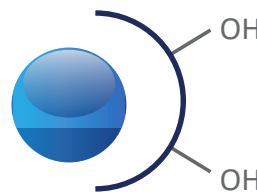
#### **puriFlash® IR-SI**

60Å - 450m<sup>2</sup>/g  
20 & 40/63µm  
pH stability: 1.5 to 6.5  
*Economical*



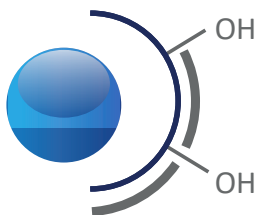
#### **puriFlash® SI-HP**

60Å - 500m<sup>2</sup>/g  
5, 10, 15, 30 & 50µm  
pH stability: 1.5 to 6.5  
*High efficiency*



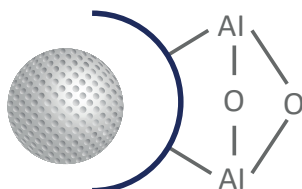
#### **puriFlash® SI-HC**

60Å - 680m<sup>2</sup>/g  
15, 25 & 50µm  
pH stability: 1.5 to 6.5  
*Greater loading capacity & productivity*  
*Low back pressure*



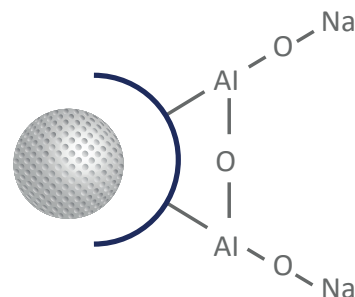
#### **puriFlash® SI-AgNO<sub>3</sub>**

60Å - 500m<sup>2</sup>/g  
50µm  
pH stability: 1.5 to 6.5  
*Purification of cis / trans stereo-isomers*



#### **ALN - Neutral**

60Å - 200m<sup>2</sup>/g  
32/63µm  
pH stability: 1.0 to 12.0  
*Natural products, Essential oils, Antibiotics, Vitamins, Alkaloids...*



#### **ALB - Basique**

60Å - 200m<sup>2</sup>/g  
32/63µm  
pH stability: 1.0 to 12.0  
*Extraction of plants, purification organic solvents, Alkaloids...*

Disposable columns

Application: Specific non-ionic & polar organic molecules

#### Notes:

Influence of water content of silica

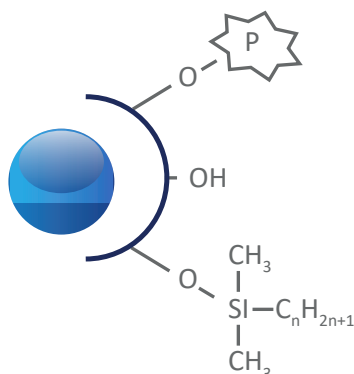
The water contents are different between the silica gels used to make the TLC plates and the same materials used to make the spherical silica gels for purification

Flash: Silica gel for TLC = 6 - 6.5%

Spherical silica gel for Flash <or = 2.0%



## Reverse Phase



### puriFlash® RP-AQ

60Å - 500m<sup>2</sup>/g

15 & 30µm

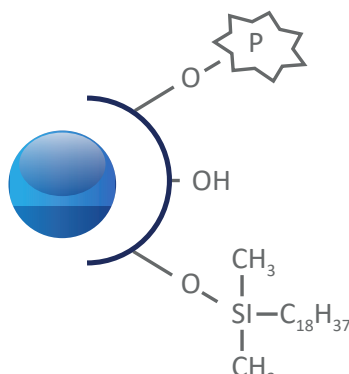
RP-alkyl

%C: 6

End-capping: Mixte

pH stability: 2.0 to 7.5

The bonding chemistry makes possible to start the gradient at a 100% of water. Suitable for the separation and purification of strongly and moderately polar molecules. Compared to a C18, the peaks are eluted earlier from the beginning of the gradient.



### puriFlash® C18-AQ

100Å - 300m<sup>2</sup>/g

5, 10, 15 & 30µm

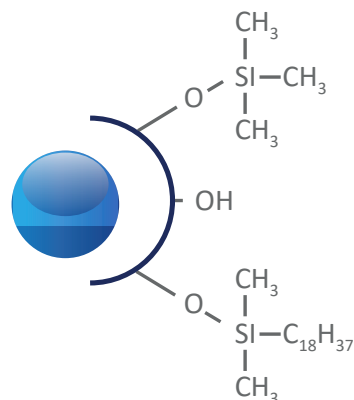
C18 Mono-functional

%C: 14

End-capping: Mixte

pH stability: 2.0 to 7.5

The bonding chemistry makes possible to start the gradient at a 100% of water. Suitable for the separation and purification of moderately polar and non-polar molecules.



### puriFlash® C18-HP

100Å - 300m<sup>2</sup>/g

5, 10, 15, 30 & 50µm

C18 Mono-functional

%C: 16,5

End-capping: One-step

pH stability: 1.5 to 7.5

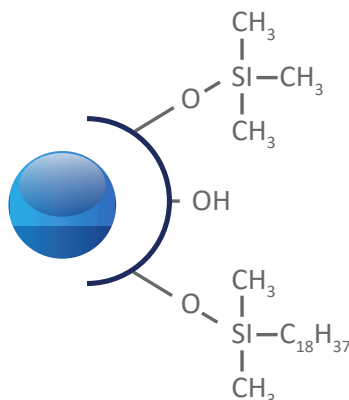
Suitable for multiple pharmaceutical applications. This is an excellent choice for routine reverse phase purifications.

USP code: L1

Re-usable column

Application:

mid & non-polar organics compounds



### Uptisphere® Strategy™ C18-HQ

100Å - 425m<sup>2</sup>/g

1.7, 2.2, 3, 5, 10, 15µm

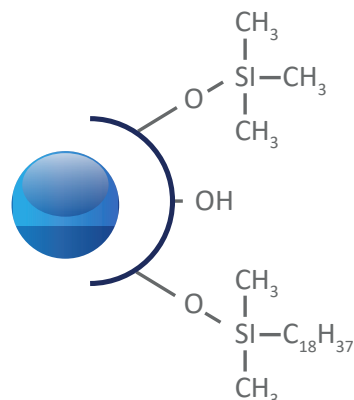
C18 Mono-functional

%C: 19

End-capping: Multi-step

pH stability: 1.0 to 10.0

Suitable for many pharmaceutical applications and routine methods. Its specific surface area of 425m<sup>2</sup>/g gives it a high loading capacity.



### puriFlash® C18-XS

100Å - 300m<sup>2</sup>/g

5, 10, 15 & 30µm

C18 Mono-functional

%C: 17

End-capping: Multi-step

pH stability: 1 to 10.0

The proprietary end-capping multi-step technology ensures stability under high pH conditions, up to 10. It is an excellent phase for the complete separation of basic molecules.

#### Notes:

Also available for first step cleaning of crude sample => **Irregular puriFlash® IR C18**

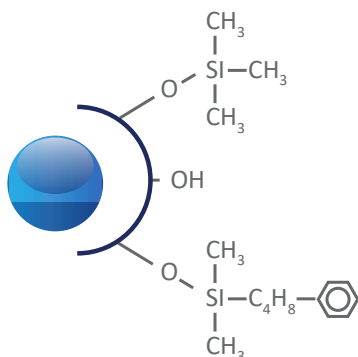
60Å - 450m<sup>2</sup>/g - 40/63 µm - C18 monofonctionnel - %C: 20 -

End-capping: one-step - Stabilité pH: 1.5 to 7.0

Application: non-polar organics compounds



### Reverse Phase



#### Uptisphere® Strategy™ PHC4

100Å - 300m<sup>2</sup>/g

2.2, 3, 5, 10, 15µm

PH C4 Mono-functional

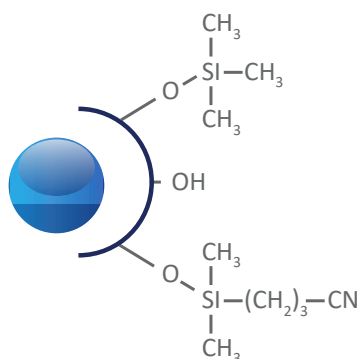
%C: 12

End-capping: One-step

pH stability: 1.5 to 7.5

*Very selective for compounds having aromatic rings and moderately polar compounds.*

### Reverse/Normal Phase



#### puriFlash® CN

60Å - 500m<sup>2</sup>/g

15 & 50µm

CN monofunctional

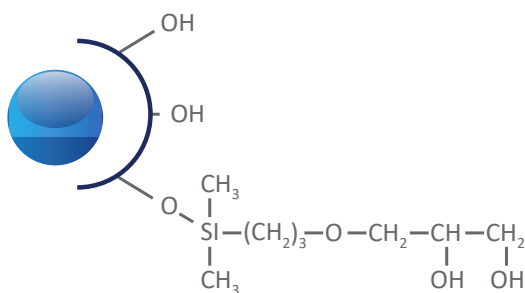
%C : 5

End-capping: One-step

pH stability: 1.5 to 7.5

*Used in normal mode to purify polar compounds and in reverse mode for moderately polar.*

### Normal Phase / Hilic



#### puriFlash® Diol

60Å - 500m<sup>2</sup>/g

5, 10, 15, 30 & 50µm

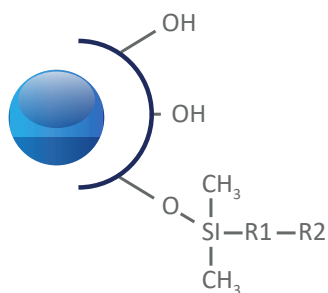
Diol Mono-functional

End-capping: None

pH stability: 1.5 to 6.5

*The Diol function imparts a globally neutral surface to the silica. Compared to a virgin silica, this grafted diol silica allows a better separation of the basic molecules in normal phase.*

### Hilic



#### Uptisphere® Strategy™ Hilic-HIA

100Å - 300m<sup>2</sup>/g

2.2, 3, 5, 10, 15µm

Proprietary bonding & end-capping

pH stability: 2.0 to 7.0

*Separation of highly polar water-soluble molecules in Hilic mode.*

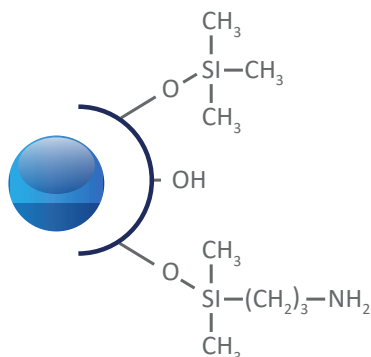
*Typical mobile phase: H<sub>2</sub>O/ACN*

*(> 70%).*

*ANP is an excellent alternative to reverse phase purification for highly polar compounds.*



### Normal Phase / Ion exchange



#### puriFlash® NH2-HC

60Å - 680m<sup>2</sup>/g

50µm

Amino

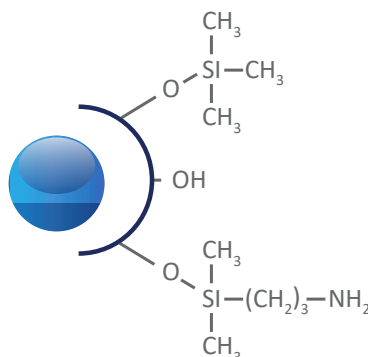
%C: 4

End-capping: n.c

pH stability: 1.5 to 6.5

Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH ... functions.

### Normal Phase / Ion exchange



#### puriFlash® NH2

100Å - 300m<sup>2</sup>/g

5, 10, 15, 30 & 50 µm

Amino

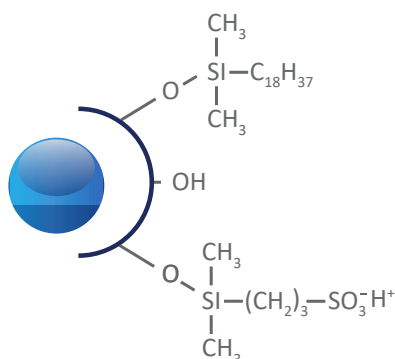
%C: 4

End-capping: One-step

pH stability: 2 to 6.5

Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH ... functions.

### Reverse Phase / Ion exchange



#### puriFlash® MM1

100Å - 400m<sup>2</sup>/g

50µm

RP alkyl / Strong cation exchange - SCX

0.1meq/g

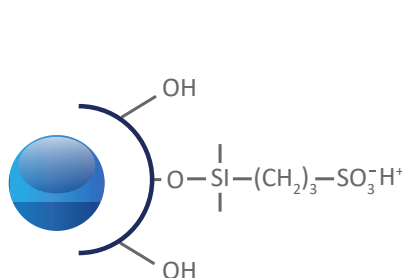
End-capping: One-step

pH stability: 1.0 to 7.5

The hydrophobic & ion exchange mixed bonding give a unique selectivity.

Compounds which have a basic function are retained by the ion exchanger. An organic solvent will eluate the hydrophobic compounds

### Ion exchange



#### puriFlash® SCX

100Å - 400m<sup>2</sup>/g

50µm

Strong cation exchange - SCX

0.3meq/g

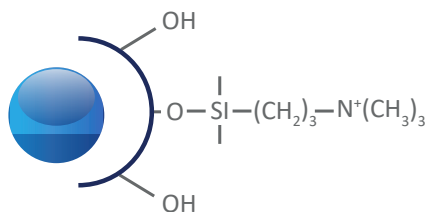
End-capping: None

pH stability: 1.0 to 7.5

A strong cation exchanger containing sulphonic acids for purifying weakly basic molecules having one or more positive charges.



### Ion exchange



#### puriFlash® SAX

60Å - 500m<sup>2</sup>/g

50µm

Strong anion exchange - SAX

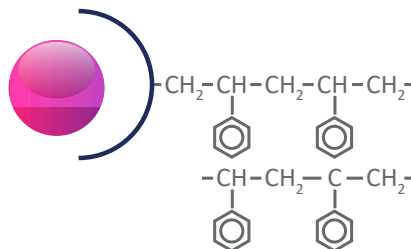
0.3meq/g

End-capping: None

pH stability: 1.0 to 7.5

A strong anion exchanger containing quaternary amines for purifying weakly acid molecules having one or more negative charges, nucleotides, nucleosides, organic acids, etc.

### Reverse Phase



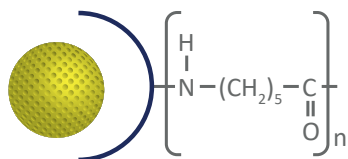
#### Ultra-Pur PSDVB (Atoll X)

100Å - 800m<sup>2</sup>/g

40µm

pH stability: 1.0 to 13.0

A Universal polymer with a large specific surface for the purification of medium and non-polar compounds with Mw < 5 KD under pH conditions from 1 to 13.



#### Polyamide 6

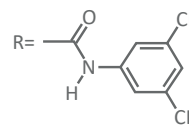
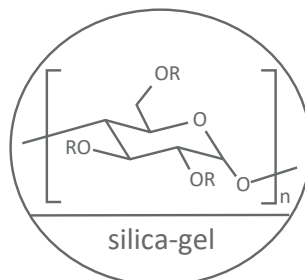
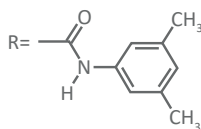
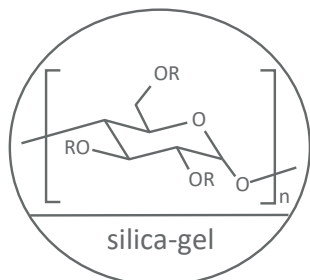
60Å - 100µm

pH stability: n.c.

Selective towards flavones, anthraquinones, aromatic compounds, Nitrates, phenols, sulfonic acids and carboxylic acids, amines, amides, etc...



### Chiral Stationary Phases



#### IA chiral

20 $\mu$ m

Amylose tris-(3,5-dimethylphenyl carbamate)

Immobilized on silica gel

Chiral compounds in normal and reverse phase such as

Bupivacaine, Indapamide, suproferm...

#### IC chiral

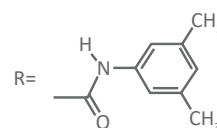
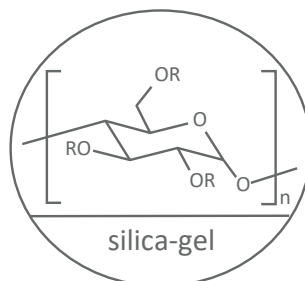
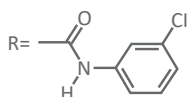
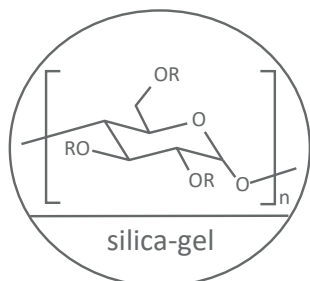
20 $\mu$ m

Cellulose tris-(3,5-dichlorophenyl carbamate) Immobilized on silica

gel

Chiral compounds in normal and inverse phase, such as Econazole,

Indoprofen, 5-Fluoro-1 (tetrahydro-2-furyl) uracil, etc.



#### ID chiral

20 $\mu$ m

Amylose tris-(3-Chlorophenyl carbamate) Immobilized on silica gel

Chiral compounds in normal and reverse phase such as ( $\pm$ )

-Hydrobenzoin, Sulconazole, Tropic acid...

#### OD-I chiral

20 $\mu$ m

cellulose tris-(3,5 dimethylphenyl carbamate) Immobilized on silica

gel

Chiral compounds in normal and reverse phase such as

2-Bromomethyl-1,4-benzodioxane, pindolol, Troger's Base, etc.



### puriFlash® Dry-Load

Dry-load columns for solid deposits allow the injection of a raw sample insoluble (or soluble) in the mobile phase.

Compared to liquid injection, the solid deposit avoids the diffusion of raw sample in the purification column. It improves the resolution, the efficiency and the purity of the products collected.

The solid deposit that can be made with silica, C18 or Celite. Unlike open cartridges, it does not require the use of a piston or of specific adapters.

The max. pressure is 2x the standard solid deposit cartridges.

They are compatible with the use of Interchim® 15µm puriFlash® columns.

- Luer lockInlet & Outlet
- 4g to 300g Dry-load
- Compatible with all flash purification systems

Nature	Type	Format	P/N	Qty
puriFlash® Dry-Load	Empty	F0004	PF-DLE-F0004	20 u
		F0012	PF-DLE-F0012	20 u
		F0025	PF-DLE-F0025	20 u
		F0040	PF-DLE-F0040	20 u
		F0060	PF-DLE-F0060	10 u
		F0080	PF-DLE-F0080	5 u
		F0100	PF-DLE-F0100	5 u
		F0120	PF-DLE-F0120	5 u
		F0220	PF-DLE-F0220	5 u
		F0330	PF-DLE-F0330	5 u
puriFlash® Dry-Load - Tightening tool			JV0470	1 u
puriFlash® Dry-Load	SILICA HC 80%	F0004	PF-DLSIHC08-F0004	20 u
		F0012	PF-DLSIHC08-F0012	20 u
		F0025	PF-DLSIHC08-F0025	20 u
		F0040	PF-DLSIHC08-F0040	20 u
puriFlash® Dry-Load	SILICA HC 50%	F0004	PF-DLSIHC05-F0004	20 u
		F0012	PF-DLSIHC05-F0012	20 u
		F0025	PF-DLSIHC05-F0025	20 u
		F0040	PF-DLSIHC05-F0040	20 u
puriFlash® Dry-Load	CELITE 80%	F0004	PF-DLCET08-F0004	20 u
		F0012	PF-DLCET08-F0012	20 u
		F0025	PF-DLCET08-F0025	20 u
		F0040	PF-DLCET08-F0040	20 u
puriFlash® Dry-Load	C18 STD 80%	F0004	PF-DLIRC1808-F0004	5 u
		F0012	PF-DLIRC1808-F0012	5 u
		F0025	PF-DLIRC1808-F0025	5 u
		F0040	PF-DLIRC1808-F0040	5 u
puriFlash® Dry-Load	C18 STD 50%	F0004	PF-DLIRC1805-F0004	5 u
		F0012	PF-DLIRC1805-F0012	5 u
		F0025	PF-DLIRC1805-F0025	5 u
		F0040	PF-DLIRC1805-F0040	5 u



Nature	Type	Size	P/N	Qty
puriFlash® HP Dry-Load	Empty	50 x 21.2 mm	OA0320	1 u
		75 x 21.2 mm	OA0330	1 u
		100 x 21.2 mm	7A1870	1 u
		50 x 30 mm	OA0340	1 u
		75 x 30 mm	OA0350	1 u
		100 x 30 mm	7A1880	1 u
<b>puriFlash® Dry-Load - Tightening tool</b>				
			7A1590	1 u
			7A1610	1 u
<b>Replacement frit</b>				
			0A2100	1 u
			0A2110	1 u







# Stationary Phases & Columns

## puriFlash® Columns

Back to  
**SUMMARY**

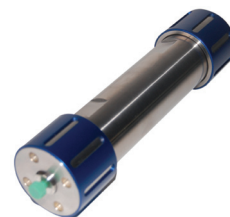


Code	F0001	F0004	F0012	F0025	F0040	F0080	F0120	F0220	F0330	F0800	F1600
Ø int. (mm)	9	12	21	21	27	31	36	60	60	78	104
L (mm)	26	68	84	133	135	205	224	153	226	341	385
CV <sub>0</sub> (mL)	1.2	5	19	32	48	102	153	269	405	1 078	2 170
Flowrate - Typical (mL/min)	2.5	5	15	15	26	34	46	127	127	216	383
Flowrate - Range (mL/min)	1 - 10	5 - 20	15 - 50	15 - 50	20 - 70	30 - 100	40 - 150	80 - 300	80 - 300	150 - 300	200 - 500



### Interchim® pre-packed prep-LC columns

Interchim® Preparative columns range from 10.0 to 50mm i.d for the purification of samples ranging from mg to g.



#### # Column hardware & column packing

The tube polishing value (Ra) has a fundamental importance in preparative chromatography. A primary reason for peak broadening and low efficiency is the use of a poorer hardware quality. As the mobile phase is slowed down near the column wall, molecules in the center of the mobile phase stream move faster than the molecules closer to the side.

All columns have extremely smooth internal surfaces (typically 8 μ inch of Ra) to considerably reduce issues of drag and maintain column efficiency. Efficiency is also managed through Interchim®'s state-of-the art proprietary packing processes - Modulo-cart Prep withstand packing pressures up to 550 bars contributing strongly to a good bed stability and column life time.

#### # Sample dispersion

The loading of sample onto a preparative column requires stringent management to establish quality separations. Column overloading results in a poor retention of pure fraction and therefore particular attention needs to be placed upon selecting the appropriate column dimension and the properties of the stationary phase. In addition, a careful control of the introduction of sample to the column is necessary to establish a homogeneous sample dispersion through the sorbent bead head. Sample typically enters a preparative column through a 1/16" fitting; poor sample loading will lead to overloading certain areas of the stationary phase whilst other areas will be underloaded.

E.g. For a 50mm i.d column with a 500μm i.d capillary fitting - sample introduced onto the column (without any sample distributor) will only interact with 0.01% of the surface column head. As well as a dramatic loss in capacity there will also be a high potential for the column head to prematurely clog, rapidly reducing column life times.

To prevent this problem Interchim®'s Modulo-cart Preparative columns are outfitted with a sample distributor. The sample distributor design maximizes the efficiency of sample volume dispersion and the sample mass introduced to the surface of the column head raising column life time.

### Interchim® DAC columns

DAC stands for dynamic axial compression. It combines the preparative column and packing system together. It is very simple to operate. The column can be used online when it is packed. Don't take the column down!

The piston of the column always produces a stable pressure on packing bed which prevent the collapse and loose of the column bed.

They can be packed with small particulate media to reach high levels of performance.

- Column tube material: 316L
- Roughness: Inner surface Ra ≤ 0.4μm
- Filter: 316L Pore size 3-5μm
- High pressure seal PTFE and 316L
- Operating temperature: 5-60°C
- Control pannel: air pressure gauge, oil gauge, regulating valve, emergency stop switch, change direction valve, shutt-off valve
- Air source: ≥ 6bar, output ≥ 8m3/min



P/N	Format	ID	Max bed height	Inlet/Outlet connection	Overall dimensions	weight
KV7350	DAC ID50	50mm	300mm	1/16"	550mm x 500mm x 1900mm	100kg
KV7370	DAC ID80	80mm	300mm	1/8"	550mm x 600mm x 2200mm	200kg
KV7390	DAC ID100	100mm	300mm	1/8"	550mm x 600mm x 2200mm	250kg



### puriFlash® C18-STD

Flash Columns	Size	50µm	RFID	Qty
F0004	IR-50C18-F0004	-R	4u	
F0012	IR-50C18-F0012	-R	2u	
F0025	IR-50C18-F0025	-R	1u	
F0040	IR-50C18-F0040	-R	1u	
F0080	IR-50C18-F0080	-R	1u	
F0120	IR-50C18-F0120	-R	1u	
F0220	IR-50C18-F0220	-R	1u	
F0330	IR-50C18-F0330	-R	1u	
F0800	IR-50C18-F0800	-R	1u	
F0160	IR-50C18-F1600	-R	1u	

 **RFID Columns**  
add [-R] at the end of P/N

### puriFlash® C18-XS

LC Preparative Columns	5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PF5C18XS-250/P46	-R	1u	PF10C18XS-250/P46	-R	1u	PF15C18XS-250/P46	-R	1u
150 x 10.0mm	PF5C18XS-150/100	-R	1u	PF10C18XS-150/100	-R	1u	PF15C18XS-150/100	-R	1u
250 x 10.0mm	PF5C18XS-250/100	-R	1u	PF10C18XS-250/100	-R	1u	PF15C18XS-250/100	-R	1u
50 x 21.2mm	PF5C18XS-050/212	-R	1u	PF10C18XS-050/212	-R	1u	PF15C18XS-050/212	-R	1u
100 x 21.2mm	PF5C18XS-100/212	-R	1u	PF10C18XS-100/212	-R	1u	PF15C18XS-100/212	-R	1u
150 x 21.2mm	PF5C18XS-150/212	-R	1u	PF10C18XS-150/212	-R	1u	PF15C18XS-150/212	-R	1u
250 x 21.2mm	PF5C18XS-250/212	-R	1u	PF10C18XS-250/212	-R	1u	PF15C18XS-250/212	-R	1u
50 x 30.0mm	PF5C18XS-050/300	-R	1u	PF10C18XS-050/300	-R	1u	PF15C18XS-050/300	-R	1u
100 x 30.0mm	PF5C18XS-100/300	-R	1u	PF10C18XS-100/300	-R	1u	PF15C18XS-100/300	-R	1u
150 x 30.0mm	PF5C18XS-150/300	-R	1u	PF10C18XS-150/300	-R	1u	PF15C18XS-150/300	-R	1u
250 x 30.0mm	PF5C18XS-250/300	-R	1u	PF10C18XS-250/300	-R	1u	PF15C18XS-250/300	-R	1u
50 x 50.0mm	PF5C18XS-050/500	-R	1u	PF10C18XS-050/500	-R	1u	PF15C18XS-050/500	-R	1u
250 x 50.0mm	PF5C18XS-250/500	-R	1u	PF10C18XS-250/500	-R	1u	PF15C18XS-250/500	-R	1u

Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty
F0001	SC-15C18XS-F0001	-R	25u	---	---	---
F0004	PF-15C18XS-F0004	-R	4u	PF-30C18XS-F0004	-R	4u
F0012	PF-15C18XS-F0012	-R	2u	PF-30C18XS-F0012	-R	2u
F0025	PF-15C18XS-F0025	-R	1u	PF-30C18XS-F0025	-R	1u
F0040	PF-15C18XS-F0040	-R	1u	PF-30C18XS-F0040	-R	1u
F0080	PF-15C18XS-F0080	-R	1u	PF-30C18XS-F0080	-R	1u
F0120	PF-15C18XS-F0120	-R	1u	PF-30C18XS-F0120	-R	1u
F0220	PF-15C18XS-F0220	-R	1u	PF-30C18XS-F0220	-R	1u
F0330	PF-15C18XS-F0330	-R	1u	PF-30C18XS-F0330	-R	1u
F0800	---	---	---	PF-30C18XS-F0800	-R	1u
F1600	---	---	---	PF-30C18XS-F1600	-R	1u

### puriFlash® C18-HP

LC Preparative Columns	5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PF5C18HP-250/P46	-R	1u	PF10C18HP-250/P46	-R	1u	PF15C18HP-250/P46	-R	1u
150 x 10.0mm	PF5C18HP-150/100	-R	1u	PF10C18HP-150/100	-R	1u	PF15C18HP-150/100	-R	1u
250 x 10.0mm	PF5C18HP-250/100	-R	1u	PF10C18HP-250/100	-R	1u	PF15C18HP-250/100	-R	1u
50 x 21.2mm	PF5C18HP-050/212	-R	1u	PF10C18HP-050/212	-R	1u	PF15C18HP-050/212	-R	1u
100 x 21.2mm	PF5C18HP-100/212	-R	1u	PF10C18HP-100/212	-R	1u	PF15C18HP-100/212	-R	1u
150 x 21.2mm	PF5C18HP-150/212	-R	1u	PF10C18HP-150/212	-R	1u	PF15C18HP-150/212	-R	1u
250 x 21.2mm	PF5C18HP-250/212	-R	1u	PF10C18HP-250/212	-R	1u	PF15C18HP-250/212	-R	1u
50 x 30.0mm	PF5C18HP-050/300	-R	1u	PF10C18HP-050/300	-R	1u	PF15C18HP-050/300	-R	1u
100 x 30.0mm	PF5C18HP-100/300	-R	1u	PF10C18HP-100/300	-R	1u	PF15C18HP-100/300	-R	1u
150 x 30.0mm	PF5C18HP-150/300	-R	1u	PF10C18HP-150/300	-R	1u	PF15C18HP-150/300	-R	1u
250 x 30.0mm	PF5C18HP-250/300	-R	1u	PF10C18HP-250/300	-R	1u	PF15C18HP-250/300	-R	1u
50 x 50.0mm	PF5C18HP-050/500	-R	1u	PF10C18HP-050/500	-R	1u	PF15C18HP-050/500	-R	1u
250 x 50.0mm	PF5C18HP-250/500	-R	1u	PF10C18HP-250/500	-R	1u	PF15C18HP-250/500	-R	1u



Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty	50µm	RFID	Qty
F0001	SC-15C18HP-F0001	-R	25u	---	-R	---	---	-R	---
F0004	PF-15C18HP-F0004	-R	4u	PF-30C18HP-F0004	-R	25u	PF-50C18HP-F0004	-R	25u
F0012	PF-15C18HP-F0012	-R	2u	PF-30C18HP-F0012	-R	4u	PF-50C18HP-F0012	-R	4u
F0025	PF-15C18HP-F0025	-R	1u	PF-30C18HP-F0025	-R	2u	PF-50C18HP-F0025	-R	2u
F0040	PF-15C18HP-F0040	-R	1u	PF-30C18HP-F0040	-R	1u	PF-50C18HP-F0040	-R	1u
F0080	PF-15C18HP-F0080	-R	1u	PF-30C18HP-F0080	-R	1u	PF-50C18HP-F0080	-R	1u
F0120	PF-15C18HP-F0120	-R	1u	PF-30C18HP-F0120	-R	1u	PF-50C18HP-F0120	-R	1u
F0220	PF-15C18HP-F0220	-R	1u	PF-30C18HP-F0220	-R	1u	PF-50C18HP-F0220	-R	1u
F0330	PF-15C18HP-F0330	-R	1u	PF-30C18HP-F0330	-R	1u	PF-50C18HP-F0330	-R	1u
F0800	---	---	---	PF-30C18HP-F0800	-R	1u	PF-50C18HP-F0800	-R	1u
F1600	---	---	---	PF-30C18HP-F1600	-R	1u	PF-50C18HP-F1600	-R	1u

## puriFlash® C18-AQ

LC Preparative Columns	5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PF5C18AQ-250/P46	-R	1u	PF10C18AQ-250/P46	-R	1u	PF15C18AQ-250/P46	-R	1u
150 x 10.0mm	PF5C18AQ-150/100	-R	1u	PF10C18AQ-150/100	-R	1u	PF15C18AQ-150/100	-R	1u
250 x 10.0mm	PF5C18AQ-250/100	-R	1u	PF10C18AQ-250/100	-R	1u	PF15C18AQ-250/100	-R	1u
50 x 21.2mm	PF5C18AQ-050/212	-R	1u	PF10C18AQ-050/212	-R	1u	PF15C18AQ-050/212	-R	1u
100 x 21.2mm	PF5C18AQ-100/212	-R	1u	PF10C18AQ-100/212	-R	1u	PF15C18AQ-100/212	-R	1u
150 x 21.2mm	PF5C18AQ-150/212	-R	1u	PF10C18AQ-150/212	-R	1u	PF15C18AQ-150/212	-R	1u
250 x 21.2mm	PF5C18AQ-250/212	-R	1u	PF10C18AQ-250/212	-R	1u	PF15C18AQ-250/212	-R	1u
50 x 30.0mm	PF5C18AQ-050/300	-R	1u	PF10C18AQ-050/300	-R	1u	PF15C18AQ-050/300	-R	1u
100 x 30.0mm	PF5C18AQ-100/300	-R	1u	PF10C18AQ-100/300	-R	1u	PF15C18AQ-100/300	-R	1u
150 x 30.0mm	PF5C18AQ-150/300	-R	1u	PF10C18AQ-150/300	-R	1u	PF15C18AQ-150/300	-R	1u
250 x 30.0mm	PF5C18AQ-250/300	-R	1u	PF10C18AQ-250/300	-R	1u	PF15C18AQ-250/300	-R	1u
50 x 50.0mm	PF5C18AQ-050/500	-R	1u	PF10C18AQ-050/500	-R	1u	PF15C18AQ-050/500	-R	1u
250 x 50.0mm	PF5C18AQ-250/500	-R	1u	PF10C18AQ-250/500	-R	1u	PF15C18AQ-250/500	-R	1u

Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty
F0001	SC-15C18AQ-F0001	-R	25u	---	-R	---
F0004	PF-15C18AQ-F0004	-R	4u	PF-30C18AQ-F0004	-R	4u
F0012	PF-15C18AQ-F0012	-R	2u	PF-30C18AQ-F0012	-R	2u
F0025	PF-15C18AQ-F0025	-R	1u	PF-30C18AQ-F0025	-R	1u
F0040	PF-15C18AQ-F0040	-R	1u	PF-30C18AQ-F0040	-R	1u
F0080	PF-15C18AQ-F0080	-R	1u	PF-30C18AQ-F0080	-R	1u
F0120	PF-15C18AQ-F0120	-R	1u	PF-30C18AQ-F0120	-R	1u
F0220	PF-15C18AQ-F0220	-R	1u	PF-30C18AQ-F0220	-R	1u
F0330	PF-15C18AQ-F0330	-R	1u	PF-30C18AQ-F0330	-R	1u
F0800	---	---	---	PF-30C18AQ-F0800	-R	1u
F1600	---	---	---	PF-30C18AQ-F1600	-R	1u

## puriFlash® RP-AQ

LC Preparative Columns	15µm	RFID	Qty
250 x 4.6mm	PF15RPAQ-250/P46	-R	1u
150 x 10.0mm	PF15RPAQ-150/100	-R	1u
250 x 10.0mm	PF15RPAQ-250/100	-R	1u
50 x 21.2mm	PF15RPAQ-050/212	-R	1u
100 x 21.2mm	PF15RPAQ-100/212	-R	1u
150 x 21.2mm	PF15RPAQ-150/212	-R	1u
250 x 21.2mm	PF15RPAQ-250/212	-R	1u
50 x 30.0mm	PF15RPAQ-050/300	-R	1u
100 x 30.0mm	PF15RPAQ-100/300	-R	1u
150 x 30.0mm	PF15RPAQ-150/300	-R	1u
250 x 30.0mm	PF15RPAQ-250/300	-R	1u
50 x 50.0mm	PF15RPAQ-050/500	-R	1u
250 x 50.0mm	PF15RPAQ-250/500	-R	1u



**RFID Columns**  
add [-R] at the end of P/N



### puriflash® RP-AQ

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty
F0001	SC-15RPAQ-F0001		-R	25u	---	-R	---
F0004	PF-15RPAQ-F0004		-R	4u	PF-30RPAQ-F0004	-R	4u
F0012	PF-15RPAQ-F0012		-R	2u	PF-30RPAQ-F0012	-R	2u
F0025	PF-15RPAQ-F0025		-R	1u	PF-30RPAQ-F0025	-R	1u
F0040	PF-15RPAQ-F0040		-R	1u	PF-30RPAQ-F0040	-R	1u
F0080	PF-15RPAQ-F0080		-R	1u	PF-30RPAQ-F0080	-R	1u
F0120	PF-15RPAQ-F0120		-R	1u	PF-30RPAQ-F0120	-R	1u
F0220	PF-15RPAQ-F0220		-R	1u	PF-30RPAQ-F0220	-R	1u
F0330	PF-15RPAQ-F0330		-R	1u	PF-30RPAQ-F0330	-R	1u
F0800	---	---	---	---	PF-30RPAQ-F0800	-R	1u
F1600	---	---	---	---	PF-30RPAQ-F1600	-R	1u

### puriflash® MM1

Flash Columns		50µm	RFID	Qty
F0004	PF-50MM1-F0004		-R	4u
F0012	PF-50MM1-F0012		-R	2u
F0025	PF-50MM1-F0025		-R	1u
F0040	PF-50MM1-F0040		-R	1u
F0080	PF-50MM1-F0080		-R	1u
F0120	PF-50MM1-F0120		-R	1u
F0220	PF-50MM1-F0220		-R	1u
F0330	PF-50MM1-F0330		-R	1u
F0800	PF-50MM1-F0800		-R	1u
F1600	PF-50MM1-F1600		-R	1u



RFID Columns  
add [-R] at the end of P/N

### puriflash® CN

Flash Columns		15µm	RFID	Qty	50µm	RFID	Qty
F0004	PF-15CN-F0004		-R	4u	PF-50CN-F0004	-R	4u
F0012	PF-15CN-F0012		-R	2u	PF-50CN-F0012	-R	2u
F0025	PF-15CN-F0025		-R	1u	PF-50CN-F0025	-R	1u
F0040	PF-15CN-F0040		-R	1u	PF-50CN-F0040	-R	1u
F0080	PF-15CN-F0080		-R	1u	PF-50CN-F0080	-R	1u
F0120	PF-15CN-F0120		-R	1u	PF-50CN-F0120	-R	1u
F0220	PF-15CN-F0220		-R	1u	PF-50CN-F0220	-R	1u
F0330	PF-15CN-F0330		-R	1u	PF-50CN-F0330	-R	1u
F0800	---	---	---	---	PF-50CN-F0800	-R	1u
F1600	---	---	---	---	PF-50CN-F1600	-R	1u

### puriflash® DIOL

LC Preparative Columns		6µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PF60H-250/P46		-R	1u	PF100H-250/P46	-R	1u	PF150H-250/P46	-R	1u
150 x 10.0mm	---	---	---	---	PF100H-150/100	-R	1u	PF150H-150/100	-R	1u
250 x 10.0mm	---	---	---	---	PF100H-250/100	-R	1u	PF150H-250/100	-R	1u
50 x 21.2mm	---	---	---	---	PF100H-050/212	-R	1u	PF150H-050/212	-R	1u
100 x 21.2mm	---	---	---	---	PF100H-100/212	-R	1u	PF150H-100/212	-R	1u
150 x 21.2mm	---	---	---	---	PF100H-150/212	-R	1u	PF150H-150/212	-R	1u
250 x 21.2mm	---	---	---	---	PF100H-250/212	-R	1u	PF150H-250/212	-R	1u
50 x 30.0mm	---	---	---	---	PF100H-050/300	-R	1u	PF150H-050/300	-R	1u
100 x 30.0mm	---	---	---	---	PF100H-100/300	-R	1u	PF150H-100/300	-R	1u
150 x 30.0mm	---	---	---	---	PF100H-150/300	-R	1u	PF150H-150/300	-R	1u
250 x 30.0mm	---	---	---	---	PF100H-250/300	-R	1u	PF150H-250/300	-R	1u
50 x 50.0mm	---	---	---	---	PF100H-050/500	-R	1u	PF150H-050/500	-R	1u
250 x 50.0mm	---	---	---	---	PF100H-250/500	-R	1u	PF150H-250/500	-R	1u



### puriFlash® DIOL

Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty	50µm	RFID	Qty
F0004	PF-15DIOL-F0004	-R	4u	PF-30DIOL-F0004	-R	4u	PF-50DIOL-F0004	-R	4u
F0012	PF-15DIOL-F0012	-R	2u	PF-30DIOL-F0012	-R	2u	PF-50DIOL-F0012	-R	2u
F0025	PF-15DIOL-F0025	-R	1u	PF-30DIOL-F0025	-R	1u	PF-50DIOL-F0025	-R	1u
F0040	PF-15DIOL-F0040	-R	1u	PF-30DIOL-F0040	-R	1u	PF-50DIOL-F0040	-R	1u
F0080	PF-15DIOL-F0080	-R	1u	PF-30DIOL-F0080	-R	1u	PF-50DIOL-F0080	-R	1u
F0120	PF-15DIOL-F0120	-R	1u	PF-30DIOL-F0120	-R	1u	PF-50DIOL-F0120	-R	1u
F0220	PF-15DIOL-F0220	-R	1u	PF-30DIOL-F0220	-R	1u	PF-50DIOL-F0220	-R	1u
F0330	PF-15DIOL-F0330	-R	1u	PF-30DIOL-F0330	-R	1u	PF-50DIOL-F0330	-R	1u
F0800	---	---	---	PF-30DIOL-F0800	-R	1u	PF-50DIOL-F0800	-R	1u
F1600	---	---	---	PF-30DIOL-F1600	-R	1u	PF-50DIOL-F1600	-R	1u

### puriFlash® IR-SI

Flash Columns	20µm	RFID	Qty	50µm	RFID	Qty
F0004	IR-20SI-F0004	-R	40u	IR-50SI-F0004	-R	40u
F0012	IR-20SI-F0012	-R	30u	IR-50SI-F0012	-R	30u
F0025	IR-20SI-F0025	-R	25u	IR-50SI-F0025	-R	25u
F0040	IR-20SI-F0040	-R	20u	IR-50SI-F0040	-R	20u
F0080	IR-20SI-F0080	-R	10u	IR-50SI-F0080	-R	10u
F0120	IR-20SI-F0120	-R	8u	IR-50SI-F0120	-R	8u
F0220	IR-20SI-F0220	-R	4u	IR-50SI-F0220	-R	4u
F0330	IR-20SI-F0330	-R	4u	IR-50SI-F0330	-R	4u
F0800	IR-20SI-F0800	-R	1u	IR-50SI-F0800	-R	1u
F1600	IR-20SI-F1600	-R	1u	IR-50SI-F1600	-R	1u



**RFID Columns**  
add [-R] at the end of P/N

### puriFlash® SIHP

LC Preparative Columns	5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PF5SIHP-250/P46	-R	1u	PF10SIHP-250/P46	-R	1u	PF15SIHP-250/P46	-R	1u
150 x 10.0mm	PF5SIHP-150/100	-R	1u	PF10SIHP-150/100	-R	1u	PF15SIHP-150/100	-R	1u
250 x 10.0mm	PF5SIHP-250/100	-R	1u	PF10SIHP-250/100	-R	1u	PF15SIHP-250/100	-R	1u
50 x 21.2mm	PF5SIHP-050/212	-R	1u	PF10SIHP-050/212	-R	1u	PF15SIHP-050/212	-R	1u
100 x 21.2mm	PF5SIHP-100/212	-R	1u	PF10SIHP-100/212	-R	1u	PF15SIHP-100/212	-R	1u
150 x 21.2mm	PF5SIHP-150/212	-R	1u	PF10SIHP-150/212	-R	1u	PF15SIHP-150/212	-R	1u
250 x 21.2mm	PF5SIHP-250/212	-R	1u	PF10SIHP-250/212	-R	1u	PF15SIHP-250/212	-R	1u
50 x 30.0mm	PF5SIHP-050/300	-R	1u	PF10SIHP-050/300	-R	1u	PF15SIHP-050/300	-R	1u
100 x 30.0mm	PF5SIHP-100/300	-R	1u	PF10SIHP-100/300	-R	1u	PF15SIHP-100/300	-R	1u
150 x 30.0mm	PF5SIHP-150/300	-R	1u	PF10SIHP-150/300	-R	1u	PF15SIHP-150/300	-R	1u
250 x 30.0mm	PF5SIHP-250/300	-R	1u	PF10SIHP-250/300	-R	1u	PF15SIHP-250/300	-R	1u
50 x 50.0mm	PF5SIHP-050/500	-R	1u	PF10SIHP-050/500	-R	1u	PF15SIHP-050/500	-R	1u
250 x 50.0mm	PF5SIHP-250/500	-R	1u	PF10SIHP-250/500	-R	1u	PF15SIHP-250/500	-R	1u

Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty	50µm	RFID	Qty
F0001	SC-15SIHP-F0001	-R	50u	---	-R	---	---	-R	---
F0004	PF-15SIHP-F0004	-R	20u	PF-30SIHP-F0004	-R	40u	PF-50SIHP-F0004	-R	40u
F0012	PF-15SIHP-F0012	-R	20u	PF-30SIHP-F0012	-R	30u	PF-50SIHP-F0012	-R	30u
F0025	PF-15SIHP-F0025	-R	12u	PF-30SIHP-F0025	-R	25u	PF-50SIHP-F0025	-R	25u
F0040	PF-15SIHP-F0040	-R	12u	PF-30SIHP-F0040	-R	20u	PF-50SIHP-F0040	-R	20u
F0080	PF-15SIHP-F0080	-R	4u	PF-30SIHP-F0080	-R	10u	PF-50SIHP-F0080	-R	10u
F0120	PF-15SIHP-F0120	-R	4u	PF-30SIHP-F0120	-R	8u	PF-50SIHP-F0120	-R	8u
F0220	PF-15SIHP-F0220	-R	2u	PF-30SIHP-F0220	-R	4u	PF-50SIHP-F0220	-R	4u
F0330	PF-15SIHP-F0330	-R	2u	PF-30SIHP-F0330	-R	4u	PF-50SIHP-F0330	-R	4u
F0800	---	---	---	PF-30SIHP-F0800	-R	1u	PF-50SIHP-F0800	-R	1u
F1600	---	---	---	PF-30SIHP-F1600	-R	1u	PF-50SIHP-F1600	-R	1u



### puriFlash® SIHP - Jumbo pack

Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty	50µm	RFID	Qty
F0004	PF-15SIHP-JP-F0004	-R	80 u	PF-30SIHP-JP-F0004	-R	160u	PF-50SIHP-JP-F0004	-R	160u
F0012	PF-15SIHP-JP-F0012	-R	80 u	PF-30SIHP-JP-F0012	-R	120u	PF-50SIHP-JP-F0012	-R	120u
F0025	PF-15SIHP-JP-F0025	-R	48 u	PF-30SIHP-JP-F0025	-R	100u	PF-50SIHP-JP-F0025	-R	100u
F0040	PF-15SIHP-JP-F0040	-R	48 u	PF-30SIHP-JP-F0040	-R	80u	PF-50SIHP-JP-F0040	-R	80u
F0080	PF-15SIHP-JP-F0080	-R	32 u	PF-30SIHP-JP-F0080	-R	40u	PF-50SIHP-JP-F0080	-R	40u
F0120	PF-15SIHP-JP-F0120	-R	32 u	PF-30SIHP-JP-F0120	-R	32u	PF-50SIHP-JP-F0120	-R	32u
F0220	PF-15SIHP-JP-F0220	-R	8 u	PF-30SIHP-JP-F0220	-R	16u	PF-50SIHP-JP-F0220	-R	16u
F0330	PF-15SIHP-JP-F0330	-R	8 u	PF-30SIHP-JP-F0330	-R	16u	PF-50SIHP-JP-F0330	-R	16u
F0800	---	---	---	PF-30SIHP-JP-F0800	-R	4u	PF-50SIHP-JP-F0800	-R	4u
F1600	---	---	---	PF-30SIHP-JP-F1600	-R	4u	PF-50SIHP-JP-F1600	-R	4u

### puriFlash® SIHC

Flash Columns	15µm	RFID	Qty	25µm	RFID	Qty	50µm	RFID	Qty
F0001	SC-15SIHC-F0001	-R	50u	---	---	---	---	---	---
F0004	PF-15SIHC-F0004	-R	20u	PF-25SIHC-F0004	-R	40u	PF-50SIHC-F0004	-R	40u
F0012	PF-15SIHC-F0012	-R	20u	PF-25SIHC-F0012	-R	30u	PF-50SIHC-F0012	-R	30u
F0025	PF-15SIHC-F0025	-R	12u	PF-25SIHC-F0025	-R	25u	PF-50SIHC-F0025	-R	25u
F0040	PF-15SIHC-F0040	-R	12u	PF-25SIHC-F0040	-R	20u	PF-50SIHC-F0040	-R	20u
F0080	PF-15SIHC-F0080	-R	4u	PF-25SIHC-F0080	-R	10u	PF-50SIHC-F0080	-R	10u
F0120	PF-15SIHC-F0120	-R	4u	PF-25SIHC-F0120	-R	8u	PF-50SIHC-F0120	-R	8u
F0220	PF-15SIHC-F0220	-R	2u	PF-25SIHC-F0220	-R	4u	PF-50SIHC-F0220	-R	4u
F0330	PF-15SIHC-F0330	-R	2u	PF-25SIHC-F0330	-R	4u	PF-50SIHC-F0330	-R	4u
F0800	---	---	---	PF-25SIHC-F0800	-R	1u	PF-50SIHC-F0800	-R	1u
F1600	---	---	---	PF-25SIHC-F1600	-R	1u	PF-50SIHC-F1600	-R	1u

### puriFlash® SIHC - Jumbo pack

Flash Columns	15µm	RFID	Qty	25µm	RFID	Qty	50µm	RFID	Qty
F0004	PF-15SIHC-JP-F0004	-R	80u	PF-25SIHC-JP-F0004	-R	160u	PF-50SIHC-JP-F0004	-R	160u
F0012	PF-15SIHC-JP-F0012	-R	80u	PF-25SIHC-JP-F0012	-R	120u	PF-50SIHC-JP-F0012	-R	120u
F0025	PF-15SIHC-JP-F0025	-R	48u	PF-25SIHC-JP-F0025	-R	100u	PF-50SIHC-JP-F0025	-R	100u
F0040	PF-15SIHC-JP-F0040	-R	48u	PF-25SIHC-JP-F0040	-R	80u	PF-50SIHC-JP-F0040	-R	80u
F0080	PF-15SIHC-JP-F0080	-R	16u	PF-25SIHC-JP-F0080	-R	40u	PF-50SIHC-JP-F0080	-R	40u
F0120	PF-15SIHC-JP-F0120	-R	16u	PF-25SIHC-JP-F0120	-R	32u	PF-50SIHC-JP-F0120	-R	32u
F0220	PF-15SIHC-JP-F0220	-R	8u	PF-25SIHC-JP-F0220	-R	16u	PF-50SIHC-JP-F0220	-R	16u
F0330	PF-15SIHC-JP-F0330	-R	8u	PF-25SIHC-JP-F0330	-R	16u	PF-50SIHC-JP-F0330	-R	16u
F0800	---	---	---	PF-25SIHC-JP-F0800	-R	4u	PF-50SIHC-JP-F0800	-R	4u
F1600	---	---	---	PF-25SIHC-JP-F1600	-R	4u	PF-50SIHC-JP-F1600	-R	4u

### puriFlash® AGNO3

Flash Columns	50µm	RFID	Qty
F0004	PF-50SIAG-F0004	-R	25u
F0012	PF-50SIAG-F0012	-R	12u
F0025	PF-50SIAG-F0025	-R	12u
F0040	PF-50SIAG-F0040	-R	8u
F0080	PF-50SIAG-F0080	-R	4u
F0120	PF-50SIAG-F0120	-R	2u
F0220	PF-50SIAG-F0220	-R	1u
F0330	PF-50SIAG-F0330	-R	1u
F0800	PF-50SIAG-F0800	-R	1u
F1600	PF-50SIAG-F1600	-R	1u



**RFID Columns**  
add [-R] at the end of P/N



### puriFlash® NH2

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PF5NH2-250/P46	-R	1u	PF10NH2-250/P46	-R	1u	PF15NH2-250/P46	-R	1u	
150 x 10.0mm	PF5NH2-150/100	-R	1u	PF10NH2-150/100	-R	1u	PF15NH2-150/100	-R	1u	
250 x 10.0mm	PF5NH2-250/100	-R	1u	PF10NH2-250/100	-R	1u	PF15NH2-250/100	-R	1u	
50 x 21.2mm	PF5NH2-050/212	-R	1u	PF10NH2-050/212	-R	1u	PF15NH2-050/212	-R	1u	
100 x 21.2mm	PF5NH2-100/212	-R	1u	PF10NH2-100/212	-R	1u	PF15NH2-100/212	-R	1u	
150 x 21.2mm	PF5NH2-150/212	-R	1u	PF10NH2-150/212	-R	1u	PF15NH2-150/212	-R	1u	
250 x 21.2mm	PF5NH2-250/212	-R	1u	PF10NH2-250/212	-R	1u	PF15NH2-250/212	-R	1u	
50 x 30.0mm	PF5NH2-050/300	-R	1u	PF10NH2-050/300	-R	1u	PF15NH2-050/300	-R	1u	
100 x 30.0mm	PF5NH2-100/300	-R	1u	PF10NH2-100/300	-R	1u	PF15NH2-100/300	-R	1u	
150 x 30.0mm	PF5NH2-150/300	-R	1u	PF10NH2-150/300	-R	1u	PF15NH2-150/300	-R	1u	
250 x 30.0mm	PF5NH2-250/300	-R	1u	PF10NH2-250/300	-R	1u	PF15NH2-250/300	-R	1u	
50 x 50.0mm	PF5NH2-050/500	-R	1u	PF10NH2-050/500	-R	1u	PF15NH2-050/500	-R	1u	
250 x 50.0mm	PF5NH2-250/500	-R	1u	PF10NH2-250/500	-R	1u	PF15NH2-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty	50µm	RFID	Qty
F0004	PF-15NH2-F0004	-R	4u	PF-30NH2-F0004	-R	4u	PF-50NH2-F0004	-R	4u	
F0012	PF-15NH2-F0012	-R	2u	PF-30NH2-F0012	-R	2u	PF-50NH2-F0012	-R	2u	
F0025	PF-15NH2-F0025	-R	1u	PF-30NH2-F0025	-R	1u	PF-50NH2-F0025	-R	1u	
F0040	PF-15NH2-F0040	-R	1u	PF-30NH2-F0040	-R	1u	PF-50NH2-F0040	-R	1u	
F0080	PF-15NH2-F0080	-R	1u	PF-30NH2-F0080	-R	1u	PF-50NH2-F0080	-R	1u	
F0120	PF-15NH2-F0120	-R	1u	PF-30NH2-F0120	-R	1u	PF-50NH2-F0120	-R	1u	
F0220	PF-15NH2-F0220	-R	1u	PF-30NH2-F0220	-R	1u	PF-50NH2-F0220	-R	1u	
F0330	PF-15NH2-F0330	-R	1u	PF-30NH2-F0330	-R	1u	PF-50NH2-F0330	-R	1u	
F0800	---	---	---	PF-30NH2-F0800	-R	1u	PF-50NH2-F0800	-R	1u	
F1600	---	---	---	PF-30NH2-F1600	-R	1u	PF-50NH2-F1600	-R	1u	

### puriFlash® NH2HC

Flash Columns		50µm	RFID	Qty
F0004	PF-50NH2HC-F0004	-R	4u	
F0012	PF-50NH2HC-F0012	-R	2u	
F0025	PF-50NH2HC-F0025	-R	1u	
F0040	PF-50NH2HC-F0040	-R	1u	
F0080	PF-50NH2HC-F0080	-R	1u	
F0120	PF-50NH2HC-F0120	-R	1u	
F0220	PF-50NH2HC-F0220	-R	1u	
F0330	PF-50NH2HC-F0330	-R	1u	
F0800	PF-50NH2HC-F0800	-R	1u	
F1600	PF-50NH2HC-F1600	-R	1u	

### puriFlash® SCX

Flash Columns		50µm	RFID	Qty
F0004	PF-50SCX-F0004	-R	4u	
F0012	PF-50SCX-F0012	-R	2u	
F0025	PF-50SCX-F0025	-R	1u	
F0040	PF-50SCX-F0040	-R	1u	
F0080	PF-50SCX-F0080	-R	1u	
F0120	PF-50SCX-F0120	-R	1u	
F0220	PF-50SCX-F0220	-R	1u	
F0330	PF-50SCX-F0330	-R	1u	
F0800	PF-50SCX-F0800	-R	1u	
F1600	PF-50SCX-F1600	-R	1u	

### puriFlash® SAX

Flash Columns		50µm	RFID	Qty
F0004	PF-50SAX-F0004	-R	4u	
F0012	PF-50SAX-F0012	-R	2u	
F0025	PF-50SAX-F0025	-R	1u	
F0040	PF-50SAX-F0040	-R	1u	
F0080	PF-50SAX-F0080	-R	1u	
F0120	PF-50SAX-F0120	-R	1u	
F0220	PF-50SAX-F0220	-R	1u	
F0330	PF-50SAX-F0330	-R	1u	
F0800	PF-50SAX-F0800	-R	1u	
F1600	PF-50SAX-F1600	-R	1u	

### puriFlash® X (Pure PSDVB)

Flash Columns		40µm	RFID	Qty
F0004	PF-X-F0004	-R	4u	
F0012	PF-X-F0012	-R	2u	
F0025	PF-X-F0025	-R	1u	
F0040	PF-X-F0040	-R	1u	
F0080	PF-X-F0080	-R	1u	
F0120	PF-X-F0120	-R	1u	
F0220	PF-X-F0220	-R	1u	
F0330	PF-X-F0330	-R	1u	
F0800	PF-X-F0800	-R	1u	
F1600	PF-X-F1600	-R	1u	





### puriFlash® P6 (Polyamide 6)

Flash Columns	100µm	RFID	Qty
F0004	PF-100P6-F0004	-R	4u
F0012	PF-100P6-F0012	-R	2u
F0025	PF-100P6-F0025	-R	2u
F0040	PF-100P6-F0040	-R	2u
F0080	PF-100P6-F0080	-R	1u
F0120	PF-100P6-F0120	-R	1u
F0220	PF-100P6-F0220	-R	1u
F0330	PF-100P6-F0330	-R	1u
F0800	PF-100P6-F0800	-R	1u
F1600	PF-100P6-F1600	-R	1u

### puriFlash® ALUMINA N (Neutral Alumina)

Flash Columns	32 / 63µm	RFID	Qty
F0001	SC-ALN-F0001	-R	25u
F0004	PF-ALN-F0004	-R	8u
F0012	PF-ALN-F0012	-R	4u
F0025	PF-ALN-F0025	-R	4u
F0040	PF-ALN-F0040	-R	4u
F0080	PF-ALN-F0080	-R	2u
F0120	PF-ALN-F0120	-R	2u
F0220	PF-ALN-F0220	-R	2u
F0330	PF-ALN-F0330	-R	1u
F0800	PF-ALN-F0800	-R	1u
F1600	PF-ALN-F1600	-R	1u

### puriFlash® ALUMINA B (Basic Alumina)

Flash Columns	32 / 63µm	RFID	Qty
F0004	PF-ALB-F0004	-R	8u
F0012	PF-ALB-F0012	-R	4u
F0025	PF-ALB-F0025	-R	4u
F0040	PF-ALB-F0040	-R	4u
F0080	PF-ALB-F0080	-R	2u
F0120	PF-ALB-F0120	-R	2u
F0220	PF-ALB-F0220	-R	2u
F0330	PF-ALB-F0330	-R	1u
F0800	PF-ALB-F0800	-R	1u
F1600	PF-ALB-F1600	-R	1u

### puriFlash® ACTIVATED CARBON

Flash Columns	420 / 840µm	RFID	Qty
F0004	PF-AC-F0004	-R	16u
F0012	PF-AC-F0012	-R	8u
F0025	PF-AC-F0025	-R	8u
F0040	PF-AC-F0040	-R	8u
F0080	PF-AC-F0080	-R	4u
F0120	PF-AC-F0120	-R	4u
F0220	PF-AC-F0220	-R	4u
F0330	PF-AC-F0330	-R	2u
F0800	PF-AC-F0800	-R	1u
F1600	PF-AC-F1600	-R	1u

### puriFlash® Chiral IA

Flash Columns	20µm	RFID	Qty
F0004	CT-20IA-F0004	-R	1u
F0012	CT-20IA-F0012	-R	1u
F0025	CT-20IA-F0025	-R	1u
F0040	CT-20IA-F0040	-R	1u
F0080	CT-20IA-F0080	-R	1u
F0120	CT-20IA-F0120	-R	1u
F0220	CT-20IA-F0220	-R	1u

### puriFlash® Chiral IC

Flash Columns	20µm	RFID	Qty
F0004	CT-20IC-F0004	-R	1u
F0012	CT-20IC-F0012	-R	1u
F0025	CT-20IC-F0025	-R	1u
F0040	CT-20IC-F0040	-R	1u

### puriFlash® Chiral ID

Flash Columns	20µm	RFID	Qty
F0004	CT-20ID-F0004	-R	1u
F0012	CT-20ID-F0012	-R	1u
F0025	CT-20ID-F0025	-R	1u
F0040	CT-20ID-F0040	-R	1u

### puriFlash® Chiral OD-I

Flash Columns	20µm	RFID	Qty
F0004	CT-20OD-F0004	-R	1u
F0012	CT-20OD-F0012	-R	1u
F0025	CT-20OD-F0025	-R	1u
F0040	CT-20OD-F0040	-R	1u





### Uptisphere® Strategy™ C18-3

LC Preparative Columns				5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	US5C183-250/P46	-R	1u	US10C183-250/P46	-R	1u	US15C183-250/P46	-R	1u			
150 x 10.0mm	US5C183-150/100	-R	1u	US10C183-150/100	-R	1u	US15C183-150/100	-R	1u			
250 x 10.0mm	US5C183-250/100	-R	1u	US10C183-250/100	-R	1u	US15C183-250/100	-R	1u			
50 x 21.2mm	US5C183-050/212	-R	1u	US10C183-050/212	-R	1u	US15C183-050/212	-R	1u			
100 x 21.2mm	US5C183-100/212	-R	1u	US10C183-100/212	-R	1u	US15C183-100/212	-R	1u			
150 x 21.2mm	US5C183-150/212	-R	1u	US10C183-150/212	-R	1u	US15C183-150/212	-R	1u			
250 x 21.2mm	US5C183-250/212	-R	1u	US10C183-250/212	-R	1u	US15C183-250/212	-R	1u			
50 x 30.0mm	US5C183-050/300	-R	1u	US10C183-050/300	-R	1u	US15C183-050/300	-R	1u			
100 x 30.0mm	US5C183-100/300	-R	1u	US10C183-100/300	-R	1u	US15C183-100/300	-R	1u			
150 x 30.0mm	US5C183-150/300	-R	1u	US10C183-150/300	-R	1u	US15C183-150/300	-R	1u			
250 x 30.0mm	US5C183-250/300	-R	1u	US10C183-250/300	-R	1u	US15C183-250/300	-R	1u			
50 x 50.0mm	US5C183-050/500	-R	1u	US10C183-050/500	-R	1u	US15C183-050/500	-R	1u			
250 x 50.0mm	US5C183-250/500	-R	1u	US10C183-250/500	-R	1u	US15C183-250/500	-R	1u			

### Uptisphere® Strategy™ C18-HQ

LC Preparative Columns				5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	US5C18HQ-250/P46	-R	1u	US10C18HQ-250/P46	-R	1u	US15C18HQ-250/P46	-R	1u			
150 x 10.0mm	US5C18HQ-150/100	-R	1u	US10C18HQ-150/100	-R	1u	US15C18HQ-150/100	-R	1u			
250 x 10.0mm	US5C18HQ-250/100	-R	1u	US10C18HQ-250/100	-R	1u	US15C18HQ-250/100	-R	1u			
50 x 21.2mm	US5C18HQ-050/212	-R	1u	US10C18HQ-050/212	-R	1u	US15C18HQ-050/212	-R	1u			
100 x 21.2mm	US5C18HQ-100/212	-R	1u	US10C18HQ-100/212	-R	1u	US15C18HQ-100/212	-R	1u			
150 x 21.2mm	US5C18HQ-150/212	-R	1u	US10C18HQ-150/212	-R	1u	US15C18HQ-150/212	-R	1u			
250 x 21.2mm	US5C18HQ-250/212	-R	1u	US10C18HQ-250/212	-R	1u	US15C18HQ-250/212	-R	1u			
50 x 30.0mm	US5C18HQ-050/300	-R	1u	US10C18HQ-050/300	-R	1u	US15C18HQ-050/300	-R	1u			
100 x 30.0mm	US5C18HQ-100/300	-R	1u	US10C18HQ-100/300	-R	1u	US15C18HQ-100/300	-R	1u			
150 x 30.0mm	US5C18HQ-150/300	-R	1u	US10C18HQ-150/300	-R	1u	US15C18HQ-150/300	-R	1u			
250 x 30.0mm	US5C18HQ-250/300	-R	1u	US10C18HQ-250/300	-R	1u	US15C18HQ-250/300	-R	1u			
50 x 50.0mm	US5C18HQ-050/500	-R	1u	US10C18HQ-050/500	-R	1u	US15C18HQ-050/500	-R	1u			
250 x 50.0mm	US5C18HQ-250/500	-R	1u	US10C18HQ-250/500	-R	1u	US15C18HQ-250/500	-R	1u			

Flash Columns				15µm	RFID	Qty
F0001	SC-15C18HQ-F0001	-R	25u			
F0004	PF-15C18HQ-F0004	-R	4u			
F0012	PF-15C18HQ-F0012	-R	2u			
F0025	PF-15C18HQ-F0025	-R	1u			
F0040	PF-15C18HQ-F0040	-R	1u			
F0080	PF-15C18HQ-F0080	-R	1u			
F0120	PF-15C18HQ-F0120	-R	1u			
F0220	PF-15C18HQ-F0220	-R	1u			
F0330	PF-15C18HQ-F0330	-R	1u			



**RFID Columns**  
add [-R] at the end of P/N

### Uptisphere® Strategy™ C18-RP

LC Preparative Columns				5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	US5RP-250/P46	-R	1u	US10RP-250/P46	-R	1u	US15RP-250/P46	-R	1u			
150 x 10.0mm	US5RP-150/100	-R	1u	US10RP-150/100	-R	1u	US15RP-150/100	-R	1u			
250 x 10.0mm	US5RP-250/100	-R	1u	US10RP-250/100	-R	1u	US15RP-250/100	-R	1u			
50 x 21.2mm	US5RP-050/212	-R	1u	US10RP-050/212	-R	1u	US15RP-050/212	-R	1u			
100 x 21.2mm	US5RP-100/212	-R	1u	US10RP-100/212	-R	1u	US15RP-100/212	-R	1u			
150 x 21.2mm	US5RP-150/212	-R	1u	US10RP-150/212	-R	1u	US15RP-150/212	-R	1u			
250 x 21.2mm	US5RP-250/212	-R	1u	US10RP-250/212	-R	1u	US15RP-250/212	-R	1u			
50 x 30.0mm	US5RP-050/300	-R	1u	US10RP-050/300	-R	1u	US15RP-050/300	-R	1u			
100 x 30.0mm	US5RP-100/300	-R	1u	US10RP-100/300	-R	1u	US15RP-100/300	-R	1u			
150 x 30.0mm	US5RP-150/300	-R	1u	US10RP-150/300	-R	1u	US15RP-150/300	-R	1u			
250 x 30.0mm	US5RP-250/300	-R	1u	US10RP-250/300	-R	1u	US15RP-250/300	-R	1u			
50 x 50.0mm	US5RP-050/500	-R	1u	US10RP-050/500	-R	1u	US15RP-050/500	-R	1u			
250 x 50.0mm	US5RP-250/500	-R	1u	US10RP-250/500	-R	1u	US15RP-250/500	-R	1u			





### Uptisphere® Strategy™ PHC4

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	US5PHC4-250/P46	-R	1u	US10PHC4-250/P46	-R	1u	US15PHC4-250/P46	-R	1u	
150 x 10.0mm	US5PHC4-150/100	-R	1u	US10PHC4-150/100	-R	1u	US15PHC4-150/100	-R	1u	
250 x 10.0mm	US5PHC4-250/100	-R	1u	US10PHC4-250/100	-R	1u	US15PHC4-250/100	-R	1u	
50 x 21.2mm	US5PHC4-050/212	-R	1u	US10PHC4-050/212	-R	1u	US15PHC4-050/212	-R	1u	
100 x 21.2mm	US5PHC4-100/212	-R	1u	US10PHC4-100/212	-R	1u	US15PHC4-100/212	-R	1u	
150 x 21.2mm	US5PHC4-150/212	-R	1u	US10PHC4-150/212	-R	1u	US15PHC4-150/212	-R	1u	
250 x 21.2mm	US5PHC4-250/212	-R	1u	US10PHC4-250/212	-R	1u	US15PHC4-250/212	-R	1u	
50 x 30.0mm	US5PHC4-050/300	-R	1u	US10PHC4-050/300	-R	1u	US15PHC4-050/300	-R	1u	
100 x 30.0mm	US5PHC4-100/300	-R	1u	US10PHC4-100/300	-R	1u	US15PHC4-100/300	-R	1u	
150 x 30.0mm	US5PHC4-150/300	-R	1u	US10PHC4-150/300	-R	1u	US15PHC4-150/300	-R	1u	
250 x 30.0mm	US5PHC4-250/300	-R	1u	US10PHC4-250/300	-R	1u	US15PHC4-250/300	-R	1u	
50 x 50.0mm	US5PHC4-050/500	-R	1u	US10PHC4-050/500	-R	1u	US15PHC4-050/500	-R	1u	
250 x 50.0mm	US5PHC4-250/500	-R	1u	US10PHC4-250/500	-R	1u	US15PHC4-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty
F0001	SC-15PHC4-F0001	-R	25u	
F0004	PF-15PHC4-F0004	-R	4u	
F0012	PF-15PHC4-F0012	-R	2u	
F0025	PF-15PHC4-F0025	-R	1u	
F0040	PF-15PHC4-F0040	-R	1u	
F0080	PF-15PHC4-F0080	-R	1u	
F0120	PF-15PHC4-F0120	-R	1u	
F0220	PF-15PHC4-F0220	-R	1u	
F0330	PF-15PHC4-F0330	-R	1u	



**RFID Columns**  
add [-R] at the end of P/N

### Uptisphere® Strategy™ HILIC-HIT

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	US5HIT-250/P46	-R	1u	US10HIT-250/P46	-R	1u	US15HIT-250/P46	-R	1u	
150 x 10.0mm	US5HIT-150/100	-R	1u	US10HIT-150/100	-R	1u	US15HIT-150/100	-R	1u	
250 x 10.0mm	US5HIT-250/100	-R	1u	US10HIT-250/100	-R	1u	US15HIT-250/100	-R	1u	
50 x 21.2mm	US5HIT-050/212	-R	1u	US10HIT-050/212	-R	1u	US15HIT-050/212	-R	1u	
100 x 21.2mm	US5HIT-100/212	-R	1u	US10HIT-100/212	-R	1u	US15HIT-100/212	-R	1u	
150 x 21.2mm	US5HIT-150/212	-R	1u	US10HIT-150/212	-R	1u	US15HIT-150/212	-R	1u	
250 x 21.2mm	US5HIT-250/212	-R	1u	US10HIT-250/212	-R	1u	US15HIT-250/212	-R	1u	
50 x 30.0mm	US5HIT-050/300	-R	1u	US10HIT-050/300	-R	1u	US15HIT-050/300	-R	1u	
100 x 30.0mm	US5HIT-100/300	-R	1u	US10HIT-100/300	-R	1u	US15HIT-100/300	-R	1u	
150 x 30.0mm	US5HIT-150/300	-R	1u	US10HIT-150/300	-R	1u	US15HIT-150/300	-R	1u	
250 x 30.0mm	US5HIT-250/300	-R	1u	US10HIT-250/300	-R	1u	US15HIT-250/300	-R	1u	
50 x 50.0mm	US5HIT-050/500	-R	1u	US10HIT-050/500	-R	1u	US15HIT-050/500	-R	1u	
250 x 50.0mm	US5HIT-250/500	-R	1u	US10HIT-250/500	-R	1u	US15HIT-250/500	-R	1u	

### Uptisphere® Strategy™ HILIC-HIA

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	US5HIA-250/P46	-R	1u	US10HIA-250/P46	-R	1u	US15HIA-250/P46	-R	1u	
150 x 10.0mm	US5HIA-150/100	-R	1u	US10HIA-150/100	-R	1u	US15HIA-150/100	-R	1u	
250 x 10.0mm	US5HIA-250/100	-R	1u	US10HIA-250/100	-R	1u	US15HIA-250/100	-R	1u	
50 x 21.2mm	US5HIA-050/212	-R	1u	US10HIA-050/212	-R	1u	US15HIA-050/212	-R	1u	
100 x 21.2mm	US5HIA-100/212	-R	1u	US10HIA-100/212	-R	1u	US15HIA-100/212	-R	1u	
150 x 21.2mm	US5HIA-150/212	-R	1u	US10HIA-150/212	-R	1u	US15HIA-150/212	-R	1u	
250 x 21.2mm	US5HIA-250/212	-R	1u	US10HIA-250/212	-R	1u	US15HIA-250/212	-R	1u	
50 x 30.0mm	US5HIA-050/300	-R	1u	US10HIA-050/300	-R	1u	US15HIA-050/300	-R	1u	
100 x 30.0mm	US5HIA-100/300	-R	1u	US10HIA-100/300	-R	1u	US15HIA-100/300	-R	1u	
150 x 30.0mm	US5HIA-150/300	-R	1u	US10HIA-150/300	-R	1u	US15HIA-150/300	-R	1u	
250 x 30.0mm	US5HIA-250/300	-R	1u	US10HIA-250/300	-R	1u	US15HIA-250/300	-R	1u	
50 x 50.0mm	US5HIA-050/500	-R	1u	US10HIA-050/500	-R	1u	US15HIA-050/500	-R	1u	
250 x 50.0mm	US5HIA-250/500	-R	1u	US10HIA-250/500	-R	1u	US15HIA-250/500	-R	1u	



Flash Columns		15µm	RFID	Qty
F0001	SC-15HIA-F0001		-R	25u
F0004	PF-15HIA-F0004		-R	4u
F0012	PF-15HIA-F0012		-R	2u
F0025	PF-15HIA-F0025		-R	1u
F0040	PF-15HIA-F0040		-R	1u
F0080	PF-15HIA-F0080		-R	1u
F0120	PF-15HIA-F0120		-R	1u
F0220	PF-15HIA-F0220		-R	1u
F0330	PF-15HIA-F0330		-R	1u

 **RFID Columns**  
add [-R] at the end of P/N

## Uptisphere® Strategy™ SI

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty
250 x 4.6mm	US5SI-250/P46		-R	1u	US10SI-250/P46	-R	1u
150 x 10.0mm	US5SI-150/100		-R	1u	US10SI-150/100	-R	1u
250 x 10.0mm	US5SI-250/100		-R	1u	US10SI-250/100	-R	1u
50 x 21.2mm	US5SI-050/212		-R	1u	US10SI-050/212	-R	1u
100 x 21.2mm	US5SI-100/212		-R	1u	US10SI-100/212	-R	1u
150 x 21.2mm	US5SI-150/212		-R	1u	US10SI-150/212	-R	1u
250 x 21.2mm	US5SI-250/212		-R	1u	US10SI-250/212	-R	1u
50 x 30.0mm	US5SI-050/300		-R	1u	US10SI-050/300	-R	1u
100 x 30.0mm	US5SI-100/300		-R	1u	US10SI-100/300	-R	1u
150 x 30.0mm	US5SI-150/300		-R	1u	US10SI-150/300	-R	1u
250 x 30.0mm	US5SI-250/300		-R	1u	US10SI-250/300	-R	1u
50 x 50.0mm	US5SI-050/500		-R	1u	US10SI-050/500	-R	1u
250 x 50.0mm	US5SI-250/500		-R	1u	US10SI-250/500	-R	1u

## Uptisphere® C18-NEC

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	UP5NEC-250/P46		-R	1u	UP10NEC-250/P46	-R	1u	UP15NEC-250/P46	-R	1u
150 x 10.0mm	UP5NEC-150/100		-R	1u	UP10NEC-150/100	-R	1u	UP15NEC-150/100	-R	1u
250 x 10.0mm	UP5NEC-250/100		-R	1u	UP10NEC-250/100	-R	1u	UP15NEC-250/100	-R	1u
50 x 21.2mm	UP5NEC-050/212		-R	1u	UP10NEC-050/212	-R	1u	UP15NEC-050/212	-R	1u
100 x 21.2mm	UP5NEC-100/212		-R	1u	UP10NEC-100/212	-R	1u	UP15NEC-100/212	-R	1u
150 x 21.2mm	UP5NEC-150/212		-R	1u	UP10NEC-150/212	-R	1u	UP15NEC-150/212	-R	1u
250 x 21.2mm	UP5NEC-250/212		-R	1u	UP10NEC-250/212	-R	1u	UP15NEC-250/212	-R	1u
50 x 30.0mm	UP5NEC-050/300		-R	1u	UP10NEC-050/300	-R	1u	UP15NEC-050/300	-R	1u
100 x 30.0mm	UP5NEC-100/300		-R	1u	UP10NEC-100/300	-R	1u	UP15NEC-100/300	-R	1u
150 x 30.0mm	UP5NEC-150/300		-R	1u	UP10NEC-150/300	-R	1u	UP15NEC-150/300	-R	1u
250 x 30.0mm	UP5NEC-250/300		-R	1u	UP10NEC-250/300	-R	1u	UP15NEC-250/300	-R	1u
50 x 50.0mm	UP5NEC-050/500		-R	1u	UP10NEC-050/500	-R	1u	UP15NEC-050/500	-R	1u
250 x 50.0mm	UP5NEC-250/500		-R	1u	UP10NEC-250/500	-R	1u	UP15NEC-250/500	-R	1u

## Uptisphere® CN

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	UP5CN-250/P46		-R	1u	UP10CN-250/P46	-R	1u	UP15CN-250/P46	-R	1u
150 x 10.0mm	UP5CN-150/100		-R	1u	UP10CN-150/100	-R	1u	UP15CN-150/100	-R	1u
250 x 10.0mm	UP5CN-250/100		-R	1u	UP10CN-250/100	-R	1u	UP15CN-250/100	-R	1u
50 x 21.2mm	UP5CN-050/212		-R	1u	UP10CN-050/212	-R	1u	UP15CN-050/212	-R	1u
100 x 21.2mm	UP5CN-100/212		-R	1u	UP10CN-100/212	-R	1u	UP15CN-100/212	-R	1u
150 x 21.2mm	UP5CN-150/212		-R	1u	UP10CN-150/212	-R	1u	UP15CN-150/212	-R	1u
250 x 21.2mm	UP5CN-250/212		-R	1u	UP10CN-250/212	-R	1u	UP15CN-250/212	-R	1u
50 x 30.0mm	UP5CN-050/300		-R	1u	UP10CN-050/300	-R	1u	UP15CN-050/300	-R	1u
100 x 30.0mm	UP5CN-100/300		-R	1u	UP10CN-100/300	-R	1u	UP15CN-100/300	-R	1u
150 x 30.0mm	UP5CN-150/300		-R	1u	UP10CN-150/300	-R	1u	UP15CN-150/300	-R	1u
250 x 30.0mm	UP5CN-250/300		-R	1u	UP10CN-250/300	-R	1u	UP15CN-250/300	-R	1u
50 x 50.0mm	UP5CN-050/500		-R	1u	UP10CN-050/500	-R	1u	UP15CN-050/500	-R	1u
250 x 50.0mm	UP5CN-250/500		-R	1u	UP10CN-250/500	-R	1u	UP15CN-250/500	-R	1u



### Selection Guide

Peptides	Polar	Mid & non-polar	Hydrophobic	Natural, Fatty Acids
<p><b>&lt; 40AA</b> MW: up to 5KDa</p> <p>pH: 1.5 to 8.0</p> <p>max. pH: 10</p>	<p><b>puriFlash® BIO 100 C18N</b></p>	<p><b>puriFlash® BIO 100 C18T</b></p> <p><b>puriFlash® BIO 100 C18XS</b></p>	<p>Screening Of <b>puriFlash® BIO 100 (C18N /C18T)</b></p> <p><b>puriFlash® BIO 100 C18XS</b></p>	
<p><b>&lt; 80AA</b> MW: up to 10KDa</p> <p>pH: 1.5 to 8.0</p> <p>max. pH: 10</p>	<p><b>puriFlash® BIO 200 C18N</b></p>	<p><b>puriFlash® BIO 200 C18T</b></p> <p><b>puriFlash® BIO 200 C18XS</b></p>	<p>Screening Of <b>puriFlash® BIO 200 (C18N /C18T)</b></p> <p><b>puriFlash® BIO 200 C18XS</b></p>	
<p><b>&lt; 160AA</b> MW: up to 20KDa</p> <p>pH: 1.5 to 8.0</p>	<p><b>puriFlash® BIO 200 C18N</b></p>	<p><b>puriFlash® BIO 200 C8N</b></p>	<p><b>puriFlash® BIO 200 C8N</b></p>	
<p><b>&lt; 80AA</b> MW: up to 100KDa</p> <p>pH: 1.5 to 8.0</p>				<p><b>puriFlash® BIO 300 C4AQ</b></p>
<p><b>In-Process QA/QC of Peptides Synthesis</b></p>	<p><b>In-Process QA/QC of Peptides Synthesis</b>  <b>puriFlash® BIO CS 2.6C18N =&gt; puriFlash® BIO 100 2.5C18N</b></p>			

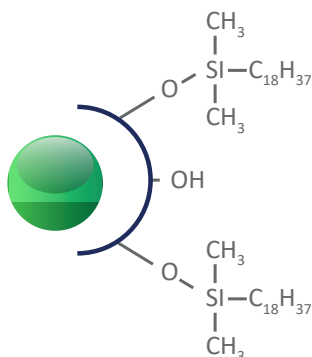
**Notes:**

Polar Peptides => HILIC mode using higher % of ACN 95 -to- 85%

Hydrophobic Peptides => it is useful to work with Water/ACN using a few % Formic Acid or 0.05% TFA ~ pH 2. In case your peptides have Lysine, Arginine etc. it is better to have an alkali environment in the solvent. You need real buffer and according to buffer solubility it is to suggest to switch to MeOH instead of ACN. Usually step-Gradients (Ramp Gradients) or Pseudo-Isocratic or very flat gradients lead to highest capacity.

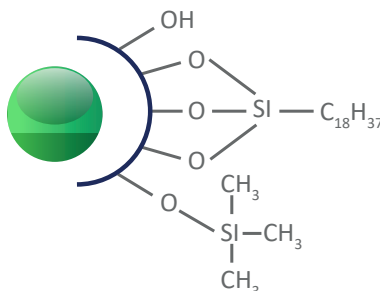


### Peptides



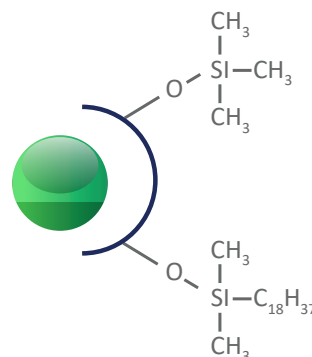
#### puriFlash® BIO C18-N

100Å - 320m<sup>2</sup>/g  
2.5, 3.5, 5, 10, 15 & 30µm  
C18 - octadecyl  
Mono-functional  
%C: 15.0  
End-capping: None  
pH stability: 1.5 to 8.0  
Use mode: Reverse  
*In-Process QA/QC of Peptides Synthesis. Analysis & Purification of polar Peptides with less than 40AA & mw. up to 5KDa under pseudo hilic mode with 85% -to- 95% ACN. Analysis & Purification of hydrophobic Peptides with less than 40AA & mw. up to 5KDa.*



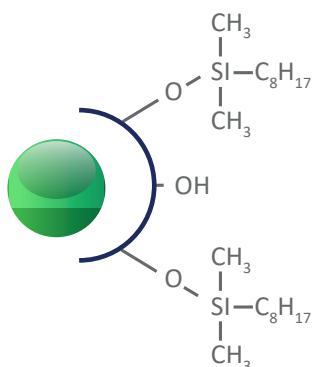
#### puriFlash® BIO C18-T

100Å - 320m<sup>2</sup>/g  
2.5, 3.5, 5, 10, 15 & 30µm  
C18 - octadecyl  
Tri-functional  
%C: 17.0  
End-capping: One-step  
pH stability: 1.5 to 8.0  
Use mode: Reverse  
*Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa.*



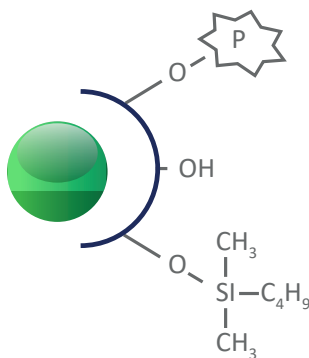
#### puriFlash® BIO C18-XS

100Å - 320m<sup>2</sup>/g  
2.5, 3.5, 5, 10, 15 & 30µm  
C18 - octadecyl  
Mono-functional  
%C: 17.0  
End-capping: Multi-step  
pH stability: 1.0 to 10.0  
Use mode: Reverse  
*Analysis & Purification of mid & non-polar Peptides, hydrophobic Peptides with less than 40AA & mw. up to 5KDa under basic conditions up to pH: 10.0*



#### puriFlash® BIO C8-N

200Å - 200m<sup>2</sup>/g  
2.5, 3.5, 5, 10, 15 & 30µm  
C8 - octadecyl  
Mono-functional  
%C: 7.0  
End-capping: None  
pH stability: 1.5 to 8.0  
Use mode: Reverse  
*Analysis & Purification of polar Peptides less than 160AA & mw. up to 20KDa under pseudo hilic mode with 85% -to- 95% ACN. Analysis & Purification of hydrophobic Peptides with less than 80AA & mw. up to 10KDa.*



#### puriFlash® BIO C4-AQ

300Å - 100m<sup>2</sup>/g  
3.5, 5, 10, 15 & 30µm  
C4 - butyl  
Mono-functional  
%C: 3.0  
End-capping: Mixte  
pH stability: 1.5 to 8.0  
Use mode: Reverse  
*Analysis & Purification of natural Peptides, fatty acids with larger than 80AA & mw. up to 100KDa.*



### puriFlash® BIO 100 C18-N

LC Preparative Columns			5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PFB5C18N-250/P46	-R	1u	PFB10C18N-250/P46	-R	1u	PFB15C18N-250/P46	-R	1u		
150 x 10.0mm	PFB5C18N-150/100	-R	1u	PFB10C18N-150/100	-R	1u	PFB15C18N-150/100	-R	1u		
250 x 10.0mm	PFB5C18N-250/100	-R	1u	PFB10C18N-250/100	-R	1u	PFB15C18N-250/100	-R	1u		
50 x 21.2mm	PFB5C18N-050/212	-R	1u	PFB10C18N-050/212	-R	1u	PFB15C18N-050/212	-R	1u		
100 x 21.2mm	PFB5C18N-100/212	-R	1u	PFB10C18N-100/212	-R	1u	PFB15C18N-100/212	-R	1u		
150 x 21.2mm	PFB5C18N-150/212	-R	1u	PFB10C18N-150/212	-R	1u	PFB15C18N-150/212	-R	1u		
250 x 21.2mm	PFB5C18N-250/212	-R	1u	PFB10C18N-250/212	-R	1u	PFB15C18N-250/212	-R	1u		
50 x 30.0mm	PFB5C18N-050/300	-R	1u	PFB10C18N-050/300	-R	1u	PFB15C18N-050/300	-R	1u		
100 x 30.0mm	PFB5C18N-100/300	-R	1u	PFB10C18N-100/300	-R	1u	PFB15C18N-100/300	-R	1u		
150 x 30.0mm	PFB5C18N-150/300	-R	1u	PFB10C18N-150/300	-R	1u	PFB15C18N-150/300	-R	1u		
250 x 30.0mm	PFB5C18N-250/300	-R	1u	PFB10C18N-250/300	-R	1u	PFB15C18N-250/300	-R	1u		
50 x 50.0mm	PFB5C18N-050/500	-R	1u	PFB10C18N-050/500	-R	1u	PFB15C18N-050/500	-R	1u		
250 x 50.0mm	PFB5C18N-250/500	-R	1u	PFB10C18N-250/500	-R	1u	PFB15C18N-250/500	-R	1u		

Flash Columns			15µm	RFID	Qty	30µm	RFID	Qty
F0004	PFB-15C18N-F0004	-R	4u	PFB-30C18N-F0004	-R	4u		
F0012	PFB-15C18N-F0012	-R	2u	PFB-30C18N-F0012	-R	2u		
F0025	PFB-15C18N-F0025	-R	1u	PFB-30C18N-F0025	-R	1u		
F0040	PFB-15C18N-F0040	-R	1u	PFB-30C18N-F0040	-R	1u		
F0080	PFB-15C18N-F0080	-R	1u	PFB-30C18N-F0080	-R	1u		
F0120	PFB-15C18N-F0120	-R	1u	PFB-30C18N-F0120	-R	1u		
F0220	PFB-15C18N-F0220	-R	1u	PFB-30C18N-F0220	-R	1u		
F0330	PFB-15C18N-F0330	-R	1u	PFB-30C18N-F0330	-R	1u		
F0800	---	---	---	PFB-30C18N-F0800	-R	1u		
F1600	---	---	---	PFB-30C18N-F1600	-R	1u		



**RFID Columns**  
add [-R] at the end of P/N

### puriFlash® BIO 100 C18-T

LC Preparative Columns			5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PFB5C18T-250/P46	-R	1u	PFB10C18T-250/P46	-R	1u	PFB15C18T-250/P46	-R	1u		
150 x 10.0mm	PFB5C18T-150/100	-R	1u	PFB10C18T-150/100	-R	1u	PFB15C18T-150/100	-R	1u		
250 x 10.0mm	PFB5C18T-250/100	-R	1u	PFB10C18T-250/100	-R	1u	PFB15C18T-250/100	-R	1u		
50 x 21.2mm	PFB5C18T-050/212	-R	1u	PFB10C18T-050/212	-R	1u	PFB15C18T-050/212	-R	1u		
100 x 21.2mm	PFB5C18T-100/212	-R	1u	PFB10C18T-100/212	-R	1u	PFB15C18T-100/212	-R	1u		
150 x 21.2mm	PFB5C18T-150/212	-R	1u	PFB10C18T-150/212	-R	1u	PFB15C18T-150/212	-R	1u		
250 x 21.2mm	PFB5C18T-250/212	-R	1u	PFB10C18T-250/212	-R	1u	PFB15C18T-250/212	-R	1u		
50 x 30.0mm	PFB5C18T-050/300	-R	1u	PFB10C18T-050/300	-R	1u	PFB15C18T-050/300	-R	1u		
100 x 30.0mm	PFB5C18T-100/300	-R	1u	PFB10C18T-100/300	-R	1u	PFB15C18T-100/300	-R	1u		
150 x 30.0mm	PFB5C18T-150/300	-R	1u	PFB10C18T-150/300	-R	1u	PFB15C18T-150/300	-R	1u		
250 x 30.0mm	PFB5C18T-250/300	-R	1u	PFB10C18T-250/300	-R	1u	PFB15C18T-250/300	-R	1u		
50 x 50.0mm	PFB5C18T-050/500	-R	1u	PFB10C18T-050/500	-R	1u	PFB15C18T-050/500	-R	1u		
250 x 50.0mm	PFB5C18T-250/500	-R	1u	PFB10C18T-250/500	-R	1u	PFB15C18T-250/500	-R	1u		

Flash Columns			15µm	RFID	Qty	30µm	RFID	Qty
F0004	PFB-15C18T-F0004	-R	4u	PFB-30C18T-F0004	-R	4u		
F0012	PFB-15C18T-F0012	-R	2u	PFB-30C18T-F0012	-R	2u		
F0025	PFB-15C18T-F0025	-R	1u	PFB-30C18T-F0025	-R	1u		
F0040	PFB-15C18T-F0040	-R	1u	PFB-30C18T-F0040	-R	1u		
F0080	PFB-15C18T-F0080	-R	1u	PFB-30C18T-F0080	-R	1u		
F0120	PFB-15C18T-F0120	-R	1u	PFB-30C18T-F0120	-R	1u		
F0220	PFB-15C18T-F0220	-R	1u	PFB-30C18T-F0220	-R	1u		
F0330	PFB-15C18T-F0330	-R	1u	PFB-30C18T-F0330	-R	1u		
F0800	---	---	---	PFB-30C18T-F0800	-R	1u		
F1600	---	---	---	PFB-30C18T-F1600	-R	1u		



### puriFlash® BIO 100 C18-XS

LC Preparative Columns			5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PFB5C18XS-250/P46	-R	1u	PFB10C18XS-250/P46	-R	1u	PFB15C18XS-250/P46	-R	1u		
150 x 10.0mm	PFB5C18XS-150/100	-R	1u	PFB10C18XS-150/100	-R	1u	PFB15C18XS-150/100	-R	1u		
250 x 10.0mm	PFB5C18XS-250/100	-R	1u	PFB10C18XS-250/100	-R	1u	PFB15C18XS-250/100	-R	1u		
50 x 21.2mm	PFB5C18XS-050/212	-R	1u	PFB10C18XS-050/212	-R	1u	PFB15C18XS-050/212	-R	1u		
100 x 21.2mm	PFB5C18XS-100/212	-R	1u	PFB10C18XS-100/212	-R	1u	PFB15C18XS-100/212	-R	1u		
150 x 21.2mm	PFB5C18XS-150/212	-R	1u	PFB10C18XS-150/212	-R	1u	PFB15C18XS-150/212	-R	1u		
250 x 21.2mm	PFB5C18XS-250/212	-R	1u	PFB10C18XS-250/212	-R	1u	PFB15C18XS-250/212	-R	1u		
50 x 30.0mm	PFB5C18XS-050/300	-R	1u	PFB10C18XS-050/300	-R	1u	PFB15C18XS-050/300	-R	1u		
100 x 30.0mm	PFB5C18XS-100/300	-R	1u	PFB10C18XS-100/300	-R	1u	PFB15C18XS-100/300	-R	1u		
150 x 30.0mm	PFB5C18XS-150/300	-R	1u	PFB10C18XS-150/300	-R	1u	PFB15C18XS-150/300	-R	1u		
250 x 30.0mm	PFB5C18XS-250/300	-R	1u	PFB10C18XS-250/300	-R	1u	PFB15C18XS-250/300	-R	1u		
50 x 50.0mm	PFB5C18XS-050/500	-R	1u	PFB10C18XS-050/500	-R	1u	PFB15C18XS-050/500	-R	1u		
250 x 50.0mm	PFB5C18XS-250/500	-R	1u	PFB10C18XS-250/500	-R	1u	PFB15C18XS-250/500	-R	1u		

Flash Columns			15µm	RFID	Qty	30µm	RFID	Qty
F0004	PFB-15C18XS-F0004	-R	4u	PFB-30C18XS-F0004	-R	4u		
F0012	PFB-15C18XS-F0012	-R	2u	PFB-30C18XS-F0012	-R	2u		
F0025	PFB-15C18XS-F0025	-R	1u	PFB-30C18XS-F0025	-R	1u		
F0040	PFB-15C18XS-F0040	-R	1u	PFB-30C18XS-F0040	-R	1u		
F0080	PFB-15C18XS-F0080	-R	1u	PFB-30C18XS-F0080	-R	1u		
F0120	PFB-15C18XS-F0120	-R	1u	PFB-30C18XS-F0120	-R	1u		
F0220	PFB-15C18XS-F0220	-R	1u	PFB-30C18XS-F0220	-R	1u		
F0330	PFB-15C18XS-F0330	-R	1u	PFB-30C18XS-F0330	-R	1u		
F0800	---	---	---	PFB-30C18XS-F0800	-R	1u		
F1600	---	---	---	PFB-30C18XS-F1600	-R	1u		



**RFID Columns**  
add [-R] at the end of P/N

### puriFlash® BIO 200 C18-N

LC Preparative Columns			5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PT5C18N-250/P46	-R	1u	PT10C18N-250/P46	-R	1u	PT15C18N-250/P46	-R	1u		
150 x 10.0mm	PT5C18N-150/100	-R	1u	PT10C18N-150/100	-R	1u	PT15C18N-150/100	-R	1u		
250 x 10.0mm	PT5C18N-250/100	-R	1u	PT10C18N-250/100	-R	1u	PT15C18N-250/100	-R	1u		
50 x 21.2mm	PT5C18N-050/212	-R	1u	PT10C18N-050/212	-R	1u	PT15C18N-050/212	-R	1u		
100 x 21.2mm	PT5C18N-100/212	-R	1u	PT10C18N-100/212	-R	1u	PT15C18N-100/212	-R	1u		
150 x 21.2mm	PT5C18N-150/212	-R	1u	PT10C18N-150/212	-R	1u	PT15C18N-150/212	-R	1u		
250 x 21.2mm	PT5C18N-250/212	-R	1u	PT10C18N-250/212	-R	1u	PT15C18N-250/212	-R	1u		
50 x 30.0mm	PT5C18N-050/300	-R	1u	PT10C18N-050/300	-R	1u	PT15C18N-050/300	-R	1u		
100 x 30.0mm	PT5C18N-100/300	-R	1u	PT10C18N-100/300	-R	1u	PT15C18N-100/300	-R	1u		
150 x 30.0mm	PT5C18N-150/300	-R	1u	PT10C18N-150/300	-R	1u	PT15C18N-150/300	-R	1u		
250 x 30.0mm	PT5C18N-250/300	-R	1u	PT10C18N-250/300	-R	1u	PT15C18N-250/300	-R	1u		
50 x 50.0mm	PT5C18N-050/500	-R	1u	PT10C18N-050/500	-R	1u	PT15C18N-050/500	-R	1u		
250 x 50.0mm	PT5C18N-250/500	-R	1u	PT10C18N-250/500	-R	1u	PT15C18N-250/500	-R	1u		

Flash Columns			15µm	RFID	Qty	30µm	RFID	Qty
F0004	PT-15C18N-F0004	-R	4u	PT-30C18N-F0004	-R	4u		
F0012	PT-15C18N-F0012	-R	2u	PT-30C18N-F0012	-R	2u		
F0025	PT-15C18N-F0025	-R	1u	PT-30C18N-F0025	-R	1u		
F0040	PT-15C18N-F0040	-R	1u	PT-30C18N-F0040	-R	1u		
F0080	PT-15C18N-F0080	-R	1u	PT-30C18N-F0080	-R	1u		
F0120	PT-15C18N-F0120	-R	1u	PT-30C18N-F0120	-R	1u		
F0220	PT-15C18N-F0220	-R	1u	PT-30C18N-F0220	-R	1u		
F0330	PT-15C18N-F0330	-R	1u	PT-30C18N-F0330	-R	1u		
F0800	---	---	1u	PT-30C18N-F0800	-R	1u		
F1600	---	---	1u	PT-30C18N-F1600	-R	1u		







### puriflash® BIO 200 C18-T

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PT5C18T-250/P46	-R	1u	PT10C18T-250/P46	-R	1u	PT15C18T-250/P46	-R	1u	
150 x 10.0mm	PT5C18T-150/100	-R	1u	PT10C18T-150/100	-R	1u	PT15C18T-150/100	-R	1u	
250 x 10.0mm	PT5C18T-250/100	-R	1u	PT10C18T-250/100	-R	1u	PT15C18T-250/100	-R	1u	
50 x 21.2mm	PT5C18T-050/212	-R	1u	PT10C18T-050/212	-R	1u	PT15C18T-050/212	-R	1u	
100 x 21.2mm	PT5C18T-100/212	-R	1u	PT10C18T-100/212	-R	1u	PT15C18T-100/212	-R	1u	
150 x 21.2mm	PT5C18T-150/212	-R	1u	PT10C18T-150/212	-R	1u	PT15C18T-150/212	-R	1u	
250 x 21.2mm	PT5C18T-250/212	-R	1u	PT10C18T-250/212	-R	1u	PT15C18T-250/212	-R	1u	
50 x 30.0mm	PT5C18T-050/300	-R	1u	PT10C18T-050/300	-R	1u	PT15C18T-050/300	-R	1u	
100 x 30.0mm	PT5C18T-100/300	-R	1u	PT10C18T-100/300	-R	1u	PT15C18T-100/300	-R	1u	
150 x 30.0mm	PT5C18T-150/300	-R	1u	PT10C18T-150/300	-R	1u	PT15C18T-150/300	-R	1u	
250 x 30.0mm	PT5C18T-250/300	-R	1u	PT10C18T-250/300	-R	1u	PT15C18T-250/300	-R	1u	
50 x 50.0mm	PT5C18T-050/500	-R	1u	PT10C18T-050/500	-R	1u	PT15C18T-050/500	-R	1u	
250 x 50.0mm	PT5C18T-250/500	-R	1u	PT10C18T-250/500	-R	1u	PT15C18T-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty
F0004	PT-15C18T-F0004	-R	4u	PT-30C18T-F0004	-R	4u	
F0012	PT-15C18T-F0012	-R	2u	PT-30C18T-F0012	-R	2u	
F0025	PT-15C18T-F0025	-R	1u	PT-30C18T-F0025	-R	1u	
F0040	PT-15C18T-F0040	-R	1u	PT-30C18T-F0040	-R	1u	
F0080	PT-15C18T-F0080	-R	1u	PT-30C18T-F0080	-R	1u	
F0120	PT-15C18T-F0120	-R	1u	PT-30C18T-F0120	-R	1u	
F0220	PT-15C18T-F0220	-R	1u	PT-30C18T-F0220	-R	1u	
F0330	PT-15C18T-F0330	-R	1u	PT-30C18T-F0330	-R	1u	
F0800	---	---	---	PT-30C18T-F0800	-R	1u	
F1600	---	---	---	PT-30C18T-F1600	-R	1u	



**RFID Columns**  
add [-R] at the end of P/N

### puriflash® BIO 200 C18-XS

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PT5C18XS-250/P46	-R	1u	PT10C18XS-250/P46	-R	1u	PT15C18XS-250/P46	-R	1u	
150 x 10.0mm	PT5C18XS-150/100	-R	1u	PT10C18XS-150/100	-R	1u	PT15C18XS-150/100	-R	1u	
250 x 10.0mm	PT5C18XS-250/100	-R	1u	PT10C18XS-250/100	-R	1u	PT15C18XS-250/100	-R	1u	
50 x 21.2mm	PT5C18XS-050/212	-R	1u	PT10C18XS-050/212	-R	1u	PT15C18XS-050/212	-R	1u	
100 x 21.2mm	PT5C18XS-100/212	-R	1u	PT10C18XS-100/212	-R	1u	PT15C18XS-100/212	-R	1u	
150 x 21.2mm	PT5C18XS-150/212	-R	1u	PT10C18XS-150/212	-R	1u	PT15C18XS-150/212	-R	1u	
250 x 21.2mm	PT5C18XS-250/212	-R	1u	PT10C18XS-250/212	-R	1u	PT15C18XS-250/212	-R	1u	
50 x 30.0mm	PT5C18XS-050/300	-R	1u	PT10C18XS-050/300	-R	1u	PT15C18XS-050/300	-R	1u	
100 x 30.0mm	PT5C18XS-100/300	-R	1u	PT10C18XS-100/300	-R	1u	PT15C18XS-100/300	-R	1u	
150 x 30.0mm	PT5C18XS-150/300	-R	1u	PT10C18XS-150/300	-R	1u	PT15C18XS-150/300	-R	1u	
250 x 30.0mm	PT5C18XS-250/300	-R	1u	PT10C18XS-250/300	-R	1u	PT15C18XS-250/300	-R	1u	
50 x 50.0mm	PT5C18XS-050/500	-R	1u	PT10C18XS-050/500	-R	1u	PT15C18XS-050/500	-R	1u	
250 x 50.0mm	PT5C18XS-250/500	-R	1u	PT10C18XS-250/500	-R	1u	PT15C18XS-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty
F0004	PT-15C18XS-F0004	-R	4u	PT-30C18XS-F0004	-R	4u	
F0012	PT-15C18XS-F0012	-R	2u	PT-30C18XS-F0012	-R	2u	
F0025	PT-15C18XS-F0025	-R	1u	PT-30C18XS-F0025	-R	1u	
F0040	PT-15C18XS-F0040	-R	1u	PT-30C18XS-F0040	-R	1u	
F0080	PT-15C18XS-F0080	-R	1u	PT-30C18XS-F0080	-R	1u	
F0120	PT-15C18XS-F0120	-R	1u	PT-30C18XS-F0120	-R	1u	
F0220	PT-15C18XS-F0220	-R	1u	PT-30C18XS-F0220	-R	1u	
F0330	PT-15C18XS-F0330	-R	1u	PT-30C18XS-F0330	-R	1u	
F0800	---	---	---	PT-30C18XS-F0800	-R	1u	
F1600	---	---	---	PT-30C18XS-F1600	-R	1u	



### puriFlash® BIO 200 C8-N

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PT5C8N-250/P46	-R	1u	PT10C8N-250/P46	-R	1u	PT15C8N-250/P46	-R	1u	
150 x 10.0mm	PT5C8N-150/100	-R	1u	PT10C8N-150/100	-R	1u	PT15C8N-150/100	-R	1u	
250 x 10.0mm	PT5C8N-250/100	-R	1u	PT10C8N-250/100	-R	1u	PT15C8N-250/100	-R	1u	
50 x 21.2mm	PT5C8N-050/212	-R	1u	PT10C8N-050/212	-R	1u	PT15C8N-050/212	-R	1u	
100 x 21.2mm	PT5C8N-100/212	-R	1u	PT10C8N-100/212	-R	1u	PT15C8N-100/212	-R	1u	
150 x 21.2mm	PT5C8N-150/212	-R	1u	PT10C8N-150/212	-R	1u	PT15C8N-150/212	-R	1u	
250 x 21.2mm	PT5C8N-250/212	-R	1u	PT10C8N-250/212	-R	1u	PT15C8N-250/212	-R	1u	
50 x 30.0mm	PT5C8N-050/300	-R	1u	PT10C8N-050/300	-R	1u	PT15C8N-050/300	-R	1u	
100 x 30.0mm	PT5C8N-100/300	-R	1u	PT10C8N-100/300	-R	1u	PT15C8N-100/300	-R	1u	
150 x 30.0mm	PT5C8N-150/300	-R	1u	PT10C8N-150/300	-R	1u	PT15C8N-150/300	-R	1u	
250 x 30.0mm	PT5C8N-250/300	-R	1u	PT10C8N-250/300	-R	1u	PT15C8N-250/300	-R	1u	
50 x 50.0mm	PT5C8N-050/500	-R	1u	PT10C8N-050/500	-R	1u	PT15C8N-050/500	-R	1u	
250 x 50.0mm	PT5C8N-250/500	-R	1u	PT10C8N-250/500	-R	1u	PT15C8N-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty
F0004	PT-15C8N-F0004	-R	4u	PT-30C8N-F0004	-R	4u	
F0012	PT-15C8N-F0012	-R	2u	PT-30C8N-F0012	-R	2u	
F0025	PT-15C8N-F0025	-R	1u	PT-30C8N-F0025	-R	1u	
F0040	PT-15C8N-F0040	-R	1u	PT-30C8N-F0040	-R	1u	
F0080	PT-15C8N-F0080	-R	1u	PT-30C8N-F0080	-R	1u	
F0120	PT-15C8N-F0120	-R	1u	PT-30C8N-F0120	-R	1u	
F0220	PT-15C8N-F0220	-R	1u	PT-30C8N-F0220	-R	1u	
F0330	PT-15C8N-F0330	-R	1u	PT-30C8N-F0330	-R	1u	
F0800	---	---	---	PT-30C8N-F0800	-R	1u	
F1600	---	---	---	PT-30C8N-F1600	-R	1u	



**RFID Columns**  
add [-R] at the end of P/N

### puriFlash® BIO 300 C4-AQ

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PP5C4AQ-250/P46	-R	1u	PP10C4AQ-250/P46	-R	1u	PP15C4AQ-250/P46	-R	1u	
150 x 10.0mm	PP5C4AQ-150/100	-R	1u	PP10C4AQ-150/100	-R	1u	PP15C4AQ-150/100	-R	1u	
250 x 10.0mm	PP5C4AQ-250/100	-R	1u	PP10C4AQ-250/100	-R	1u	PP15C4AQ-250/100	-R	1u	
50 x 21.2mm	PP5C4AQ-050/212	-R	1u	PP10C4AQ-050/212	-R	1u	PP15C4AQ-050/212	-R	1u	
100 x 21.2mm	PP5C4AQ-100/212	-R	1u	PP10C4AQ-100/212	-R	1u	PP15C4AQ-100/212	-R	1u	
150 x 21.2mm	PP5C4AQ-150/212	-R	1u	PP10C4AQ-150/212	-R	1u	PP15C4AQ-150/212	-R	1u	
250 x 21.2mm	PP5C4AQ-250/212	-R	1u	PP10C4AQ-250/212	-R	1u	PP15C4AQ-250/212	-R	1u	
50 x 30.0mm	PP5C4AQ-050/300	-R	1u	PP10C4AQ-050/300	-R	1u	PP15C4AQ-050/300	-R	1u	
100 x 30.0mm	PP5C4AQ-100/300	-R	1u	PP10C4AQ-100/300	-R	1u	PP15C4AQ-100/300	-R	1u	
150 x 30.0mm	PP5C4AQ-150/300	-R	1u	PP10C4AQ-150/300	-R	1u	PP15C4AQ-150/300	-R	1u	
250 x 30.0mm	PP5C4AQ-250/300	-R	1u	PP10C4AQ-250/300	-R	1u	PP15C4AQ-250/300	-R	1u	
50 x 50.0mm	PP5C4AQ-050/500	-R	1u	PP10C4AQ-050/500	-R	1u	PP15C4AQ-050/500	-R	1u	
250 x 50.0mm	PP5C4AQ-250/500	-R	1u	PP10C4AQ-250/500	-R	1u	PP15C4AQ-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty
F0004	PP-15C4AQ-F0004	-R	4u	PP-30C4AQ-F0004	-R	4u	
F0012	PP-15C4AQ-F0012	-R	2u	PP-30C4AQ-F0012	-R	2u	
F0025	PP-15C4AQ-F0025	-R	1u	PP-30C4AQ-F0025	-R	1u	
F0040	PP-15C4AQ-F0040	-R	1u	PP-30C4AQ-F0040	-R	1u	
F0080	PP-15C4AQ-F0080	-R	1u	PP-30C4AQ-F0080	-R	1u	
F0120	PP-15C4AQ-F0120	-R	1u	PP-30C4AQ-F0120	-R	1u	
F0220	PP-15C4AQ-F0220	-R	1u	PP-30C4AQ-F0220	-R	1u	
F0330	PP-15C4AQ-F0330	-R	1u	PP-30C4AQ-F0330	-R	1u	
F0800	---	---	---	PP-30C4AQ-F0800	-R	1u	
F1600	---	---	---	PP-30C4AQ-F1600	-R	1u	





### puriFlash® 200 C18-AQ

Flash Columns	15µm	RFID	Qty
F0004	PT-15C18AQ-F0004	-R	4u
F0012	PT-15C18AQ-F0012	-R	2u
F0025	PT-15C18AQ-F0025	-R	1u
F0040	PT-15C18AQ-F0040	-R	1u
F0080	PT-15C18AQ-F0080	-R	1u
F0120	PT-15C18AQ-F0120	-R	1u
F0220	PT-15C18AQ-F0220	-R	1u
F0330	PT-15C18AQ-F0330	-R	1u

### puriFlash® 200 C8

Flash Columns	15µm	RFID	Qty
F0004	PT-15C8-F0004	-R	4u
F0012	PT-15C8-F0012	-R	2u
F0025	PT-15C8-F0025	-R	1u
F0040	PT-15C8-F0040	-R	1u
F0080	PT-15C8-F0080	-R	1u
F0120	PT-15C8-F0120	-R	1u
F0220	PT-15C8-F0220	-R	1u
F0330	PT-15C8-F0330	-R	1u

### puriFlash® 200 C4

Flash Columns	15µm	RFID	Qty
F0004	PT-15C4-F0004	-R	4u
F0012	PT-15C4-F0012	-R	2u
F0025	PT-15C4-F0025	-R	1u
F0040	PT-15C4-F0040	-R	1u
F0080	PT-15C4-F0080	-R	1u
F0120	PT-15C4-F0120	-R	1u
F0220	PT-15C4-F0220	-R	1u
F0330	PT-15C4-F0330	-R	1u

### puriFlash® 300 C18

Flash Columns	15µm	RFID	Qty
F0004	PP-15C18-F0004	-R	4u
F0012	PP-15C18-F0012	-R	2u
F0025	PP-15C18-F0025	-R	1u
F0040	PP-15C18-F0040	-R	1u
F0080	PP-15C18-F0080	-R	1u
F0120	PP-15C18-F0120	-R	1u
F0220	PP-15C18-F0220	-R	1u
F0330	PP-15C18-F0330	-R	1u

### puriFlash® 300 C4

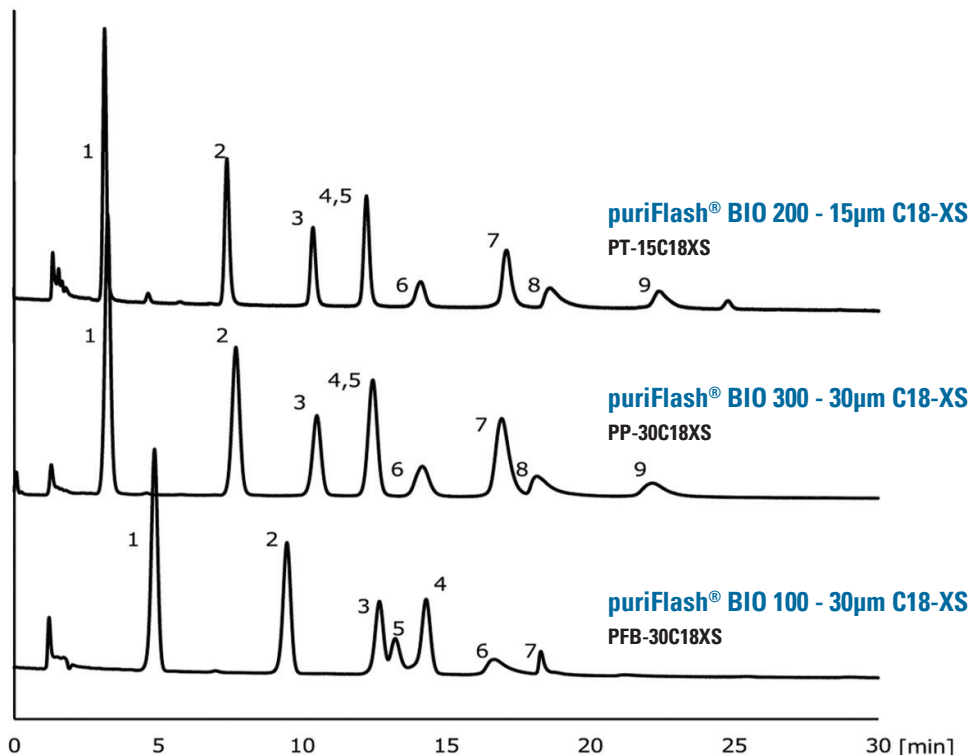
Flash Columns	15µm	RFID	Qty
F0004	PP-15C4-F0004	-R	4u
F0012	PP-15C4-F0012	-R	2u
F0025	PP-15C4-F0025	-R	1u
F0040	PP-15C4-F0040	-R	1u
F0080	PP-15C4-F0080	-R	1u
F0120	PP-15C4-F0120	-R	1u
F0220	PP-15C4-F0220	-R	1u
F0330	PP-15C4-F0330	-R	1u



**RFID Columns**  
add [-R] at the end of P/N



### Separation / Purification of Peptides and Proteins by HPLC / UV

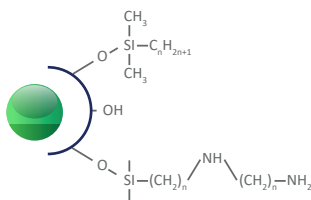


1. Gly-Tyr (238 Da)
2. Val-Tyr-Val (380 Da)
3. Met-Enkephalin (574Da)
4. Leu-Enkephalin (556 Da)
5. Angiotensin II acetate (1 kDa)
6. Ribonuclease A (13.7 kDa)
7. Cytochrome C (12 kDa)
8. Holo-transferrin (80 kDa)
9. Aponyoglobin (16.95 kDa)

Acetonitrile / Water = 5:95 - 60:40( v/v), tg : 0 - 30min,  
 flow rate : 2mL/min, T° : 40°C, 280nm, Injection 10µL,  
 Column size 250x4.6mmID  
 Peptide standard (0.25 mg/mL) + Protein standard (0.5mg/mL)



### Oligonucleotides



#### puriFlash® BIO RPNH

100Å - 320m<sup>2</sup>/g  
 3.5, 5, 10, 15 & 30µm  
 RP - Alkyl chain/Amines  
 Mono-functional  
 %C: 4.0  
 End-capping: None  
 pH stability: 1.5 to 8.0  
 Use mode: Reverse/Ion Exchange  
*Ultra fast & efficient analysis of oligonucleotides up to 25 mer.*

Oligonucleotides < 25 mer.....	puriFlash® BIO 100 2.5RPNH
Oligonucleotides < 40 mer.....	puriFlash® BIO 200 RPNH
Aptamers, DNA.....	puriFlash® BIO 300 RPNH

### puriFlash® BIO 100 2.5µm RP-NH

LC Preparative Columns	2.1mm ID	RFID	Qty	3.0mm ID	RFID	Qty	4.6mm ID	RFID	Qty
25mm	PFB2.5RPNH-025/021	-R	1u	PFB2.5RPNH-025/030	-R	1u	PFB2.5RPNH-025/046	-R	1u
50 mm	PFB2.5RPNH-050/021	-R	1u	PFB2.5RPNH-050/030	-R	1u	PFB2.5RPNH-050/046	-R	1u
75mm	PFB2.5RPNH-075/021	-R	1u	PFB2.5RPNH-075/030	-R	1u	PFB2.5RPNH-075/046	-R	1u
100mm	PFB2.5RPNH-100/021	-R	1u	PFB2.5RPNH-100/030	-R	1u	PFB2.5RPNH-100/046	-R	1u
125mm	PFB2.5RPNH-125/021	-R	1u	PFB2.5RPNH-125/030	-R	1u	PFB2.5RPNH-125/046	-R	1u
150mm	PFB2.5RPNH-150/021	-R	1u	PFB2.5RPNH-150/030	-R	1u	PFB2.5RPNH-150/046	-R	1u

### puriFlash® BIO 200 RP-NH

LC Preparative Columns	5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PT5RPNH-250/P46	-R	1u	PT10RPNH-250/P46	-R	1u	PT15RPNH-250/P46	-R	1u
150 x 10.0mm	PT5RPNH-150/100	-R	1u	PT10RPNH-150/100	-R	1u	PT15RPNH-150/100	-R	1u
250 x 10.0mm	PT5RPNH-250/100	-R	1u	PT10RPNH-250/100	-R	1u	PT15RPNH-250/100	-R	1u
50 x 21.2mm	PT5RPNH-050/212	-R	1u	PT10RPNH-050/212	-R	1u	PT15RPNH-050/212	-R	1u
100 x 21.2mm	PT5RPNH-100/212	-R	1u	PT10RPNH-100/212	-R	1u	PT15RPNH-100/212	-R	1u
150 x 21.2mm	PT5RPNH-150/212	-R	1u	PT10RPNH-150/212	-R	1u	PT15RPNH-150/212	-R	1u
250 x 21.2mm	PT5RPNH-250/212	-R	1u	PT10RPNH-250/212	-R	1u	PT15RPNH-250/212	-R	1u
50 x 30.0mm	PT5RPNH-050/300	-R	1u	PT10RPNH-050/300	-R	1u	PT15RPNH-050/300	-R	1u
100 x 30.0mm	PT5RPNH-100/300	-R	1u	PT10RPNH-100/300	-R	1u	PT15RPNH-100/300	-R	1u
150 x 30.0mm	PT5RPNH-150/300	-R	1u	PT10RPNH-150/300	-R	1u	PT15RPNH-150/300	-R	1u
250 x 30.0mm	PT5RPNH-250/300	-R	1u	PT10RPNH-250/300	-R	1u	PT15RPNH-250/300	-R	1u
50 x 50.0mm	PT5RPNH-050/500	-R	1u	PT10RPNH-050/500	-R	1u	PT15RPNH-050/500	-R	1u
250 x 50.0mm	PT5RPNH-250/500	-R	1u	PT10RPNH-250/500	-R	1u	PT15RPNH-250/500	-R	1u

Flash Columns	15µm	RFID	Qty	30µm	RFID	Qty
F0004	PT-15RPNH-F0004	-R	4u	PT-30RPNH-F0004	-R	4u
F0012	PT-15RPNH-F0012	-R	2u	PT-30RPNH-F0012	-R	2u
F0025	PT-15RPNH-F0025	-R	1u	PT-30RPNH-F0025	-R	1u
F0040	PT-15RPNH-F0040	-R	1u	PT-30RPNH-F0040	-R	1u
F0080	PT-15RPNH-F0080	-R	1u	PT-30RPNH-F0080	-R	1u
F0120	PT-15RPNH-F0120	-R	1u	PT-30RPNH-F0120	-R	1u
F0220	PT-15RPNH-F0220	-R	1u	PT-30RPNH-F0220	-R	1u
F0330	PT-15RPNH-F0330	-R	1u	PT-30RPNH-F0330	-R	1u
F0800	---	---	---	PT-30RPNH-F0800	-R	1u
F1600	---	---	---	PT-30RPNH-F1600	-R	1u



**RFID Columns**  
add [-R] at the end of P/N



### puriflash® BIO 300 RP-NH

LC Preparative Columns		5µm	RFID	Qty	10µm	RFID	Qty	15µm	RFID	Qty
250 x 4.6mm	PP5RPNH-250/P46	-R	1u	PP10RPNH-250/P46	-R	1u	PP15RPNH-250/P46	-R	1u	
150 x 10.0mm	PP5RPNH-150/100	-R	1u	PP10RPNH-150/100	-R	1u	PP15RPNH-150/100	-R	1u	
250 x 10.0mm	PP5RPNH-250/100	-R	1u	PP10RPNH-250/100	-R	1u	PP15RPNH-250/100	-R	1u	
50 x 21.2mm	PP5RPNH-050/212	-R	1u	PP10RPNH-050/212	-R	1u	PP15RPNH-050/212	-R	1u	
100 x 21.2mm	PP5RPNH-100/212	-R	1u	PP10RPNH-100/212	-R	1u	PP15RPNH-100/212	-R	1u	
150 x 21.2mm	PP5RPNH-150/212	-R	1u	PP10RPNH-150/212	-R	1u	PP15RPNH-150/212	-R	1u	
250 x 21.2mm	PP5RPNH-250/212	-R	1u	PP10RPNH-250/212	-R	1u	PP15RPNH-250/212	-R	1u	
50 x 30.0mm	PP5RPNH-050/300	-R	1u	PP10RPNH-050/300	-R	1u	PP15RPNH-050/300	-R	1u	
100 x 30.0mm	PP5RPNH-100/300	-R	1u	PP10RPNH-100/300	-R	1u	PP15RPNH-100/300	-R	1u	
150 x 30.0mm	PP5RPNH-150/300	-R	1u	PP10RPNH-150/300	-R	1u	PP15RPNH-150/300	-R	1u	
250 x 30.0mm	PP5RPNH-250/300	-R	1u	PP10RPNH-250/300	-R	1u	PP15RPNH-250/300	-R	1u	
50 x 50.0mm	PP5RPNH-050/500	-R	1u	PP10RPNH-050/500	-R	1u	PP15RPNH-050/500	-R	1u	
250 x 50.0mm	PP5RPNH-250/500	-R	1u	PP10RPNH-250/500	-R	1u	PP15RPNH-250/500	-R	1u	

Flash Columns		15µm	RFID	Qty	30µm	RFID	Qty
F0004	PP-15RPNH-F0004	-R	4u	PP-30RPNH-F0004	-R	4u	
F0012	PP-15RPNH-F0012	-R	2u	PP-30RPNH-F0012	-R	2u	
F0025	PP-15RPNH-F0025	-R	1u	PP-30RPNH-F0025	-R	1u	
F0040	PP-15RPNH-F0040	-R	1u	PP-30RPNH-F0040	-R	1u	
F0080	PP-15RPNH-F0080	-R	1u	PP-30RPNH-F0080	-R	1u	
F0120	PP-15RPNH-F0120	-R	1u	PP-30RPNH-F0120	-R	1u	
F0220	PP-15RPNH-F0220	-R	1u	PP-30RPNH-F0220	-R	1u	
F0330	PP-15RPNH-F0330	-R	1u	PP-30RPNH-F0330	-R	1u	
F0800	---	---	---	PP-30RPNH-F0800	-R	1u	
F1600	---	---	---	PP-30RPNH-F1600	-R	1u	



**RFID Columns**  
add [-R] at the end of P/N

## Desalting & Host Cell Fishing

### puriflash® BIO 200 45RP

200Å - 200m<sup>2</sup>/g

45µm

RP - Alkyl chain

Mono-functional

%C: 5.0

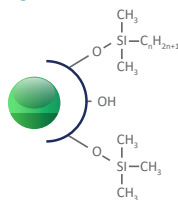
End-capping: Mixte

pH stability: 1.5 to 8.0

Use mode: Reverse

Desalting columns

for Synthetic Peptides



### puriflash® BIO 300 50RPT

300Å - 100m<sup>2</sup>/g

50µm

RP - Alkyl chain

Tri-functional

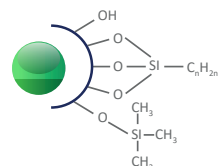
%C: 3.0

End-capping: One-step

pH stability: 1.5 to 8.0

Use mode: Reverse

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.



Flash Columns		45µm	RFID	Qty
F0004	PT-45RP-F0004	-R	4u	
F0012	PT-45RP-F0012	-R	2u	
F0025	PT-45RP-F0025	-R	1u	
F0040	PT-45RP-F0040	-R	1u	
F0080	PT-45RP-F0080	-R	1u	
F0120	PT-45RP-F0120	-R	1u	
F0220	PT-45RP-F0220	-R	1u	
F0330	PT-45RP-F0330	-R	1u	
F0800	PT-45RP-F0800	-R	1u	
F1600	PT-45RP-F1600	-R	1u	

Flash Columns		50µm	RFID	Qty
F0004	PP-50RPT-F0004	-R	4u	
F0012	PP-50RPT-F0012	-R	2u	
F0025	PP-50RPT-F0025	-R	1u	
F0040	PP-50RPT-F0040	-R	1u	
F0080	PP-50RPT-F0080	-R	1u	
F0120	PP-50RPT-F0120	-R	1u	
F0220	PP-50RPT-F0220	-R	1u	
F0330	PP-50RPT-F0330	-R	1u	
F0800	PP-50RPT-F0800	-R	1u	
F1600	PP-50RPT-F1600	-R	1u	

**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.

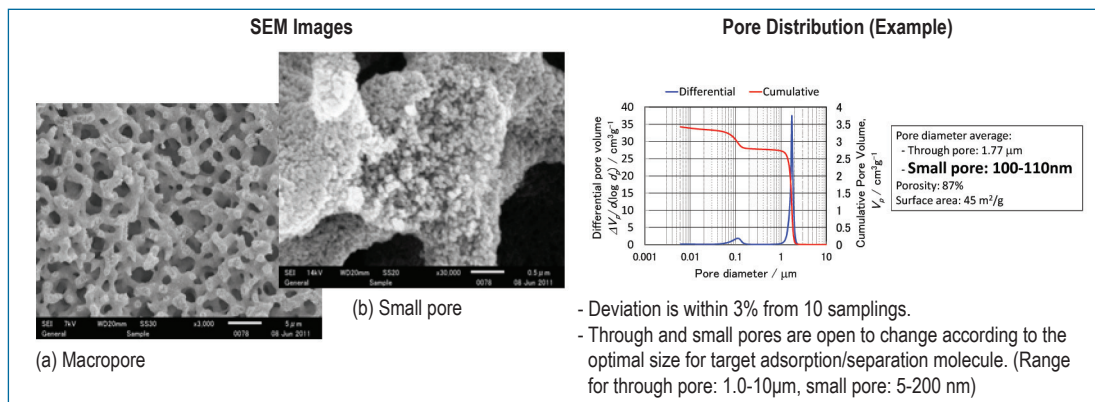




Interchim® Peptides monolith column is a pre-packed column with the novel silica gel for reversed-phase liquid chromatography that will permit high-speed processing only with a medium to low back pressure. The distinguished structure of Interchim® Peptides monolith (through pores) leads to a faster & deeper solvent perfusion inside the particles themselves. That conduces to a more effective purification, especially of macromolecules such as peptides, proteins, and nucleic acids, with an extremely low pressure.

- High Purity and yet Low Pressure
- High Throughput
- Better resolution than conventional 15µm media only with less than 1/4 back pressure

### Crack-Free Controlled Fabrication > 500mL With Sharp Pore Distribution



#### # High Resolution & High Yield

- Effective for both small and large molecules in a gradient method
- Easy scaling up of the batch size

#### # Ultra High-Throughput

- ~80% reduction of purification time

#### # Green & Eco Purification

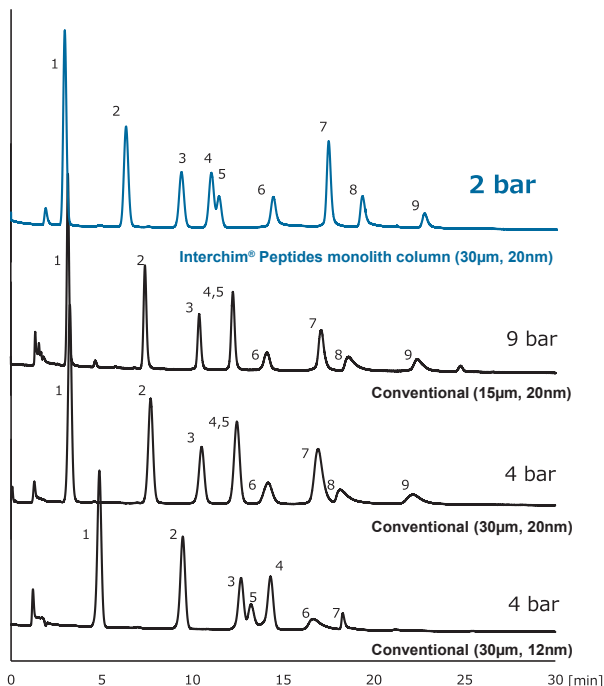
- Acetonitrile & methanol free
- Free from toxic solvents

#### # Enhanced Performance With Any System!

- Applicable even to a low-pressure pump system for better performance



1. Gly-Tyr (238 Da)
2. Val-Tyr-Val (380 Da)
3. Met-Enkephalin (574 Da)
4. Leu-enkephalin (556 Da)
5. Angiotensin II acetate (1 kDa)
6. Ribonuclease A (13.7 kDa)
7. Cytochrome c (12 kDa)
8. Holo-transferrin (80 kDa)
9. Apomyoglobin (16.95 kDa)



#### Comparative chromatogram by each ODS column for standard peptide/protein mixture separation

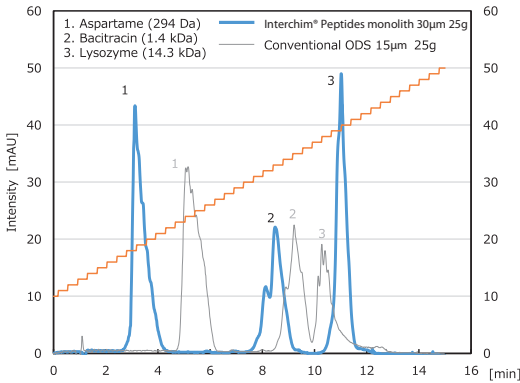
Acetonitrile: water (0.1% TFA) = 5:95-60:40(v/v), tg=0-30min, 2mL/min, 40 °C, 280nm, 250-4.6 mmID, Injection 10µL, Mixture of Peptide standard (0.25 mg/mL) and Protein standard (0.5mg/mL).



### High Resolution & High Yield

#### # High Resolution for Small to Large Molecules

Interchim® Peptides monolith column demonstrates high separation performance for a wide range of molecules. Particularly in a gradient mode, Interchim® Peptides monolith column having a particle diameter of 30µm shows equivalent or even better resolution than a conventional 15µm spherical media.

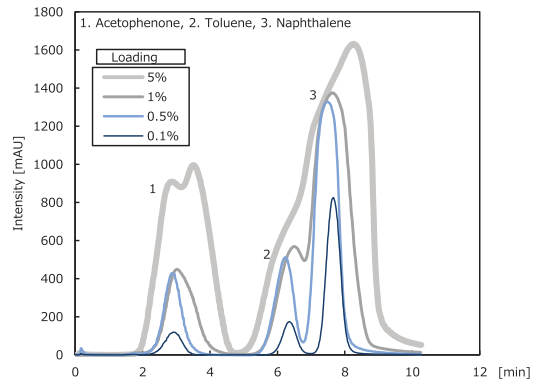


Small to Large Molecule Separation by Reversed Phase

Eluant : Acetonitrile/water(0.1% TFA)  
Gradient : 10:90-50:50 in 15 min  
Loading : 0.1% loading  
Detection : 215 nm

#### # Easy Scale-Up with Larger Column and Loading

Interchim® Peptides monolith column can solve the dilemma of giving up a high resolution purification for a larger capacity column due to the pressure limit. The feature of extremely low back pressure profile makes it easy to enlarge the column in parallel with increasing the loading amount to achieve both high resolution and high yield.



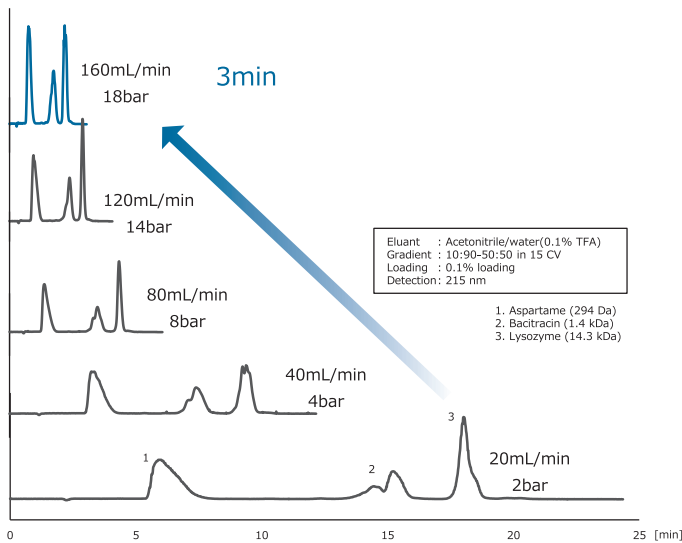
Loading Test with Small Molecules by Interchim® Peptides monolith 30µm, 12g Column

Eluant : Acetonitrile/water  
Gradient : 30:70-70:30 in 10 CV  
Detection : 215 nm

### Ultra High-Throughput

#### # ~80% Reduction of Processing Time

The Interchim® Peptides monolith column is really excellent in response to a gradient condition and displays a superb throughput at a very high flow rate. By raising the flow rate to the maximum pressure limit of the system, processing time of purification can be thoroughly shortened.



Ultra High Throughput Example by Interchim® Peptides monolith 30µm, 25g Column



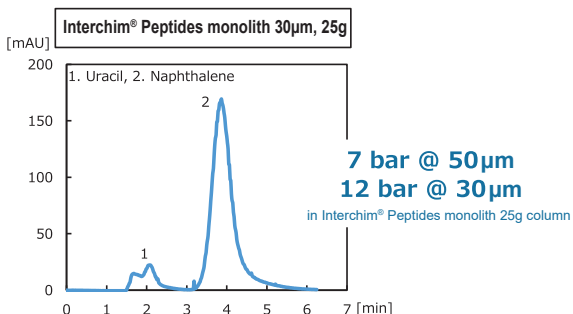




### Green & Eco Purification

#### # 2-Propanol for Eluant / Free from Toxic Reagents

Owing to its very low back pressure profile, Interchim® Peptides monolith column can achieve reverse phase purification using 2-propanol without giving up a high resolution. Green and eco processing free from toxic solvents like acetonitrile and methanol now comes true.



#### Reversed Phase Example Using 2-Propanol

Eluant : Isopropanol/water = 50:50  
Loading : 0.1% loading  
Detection : 215 nm

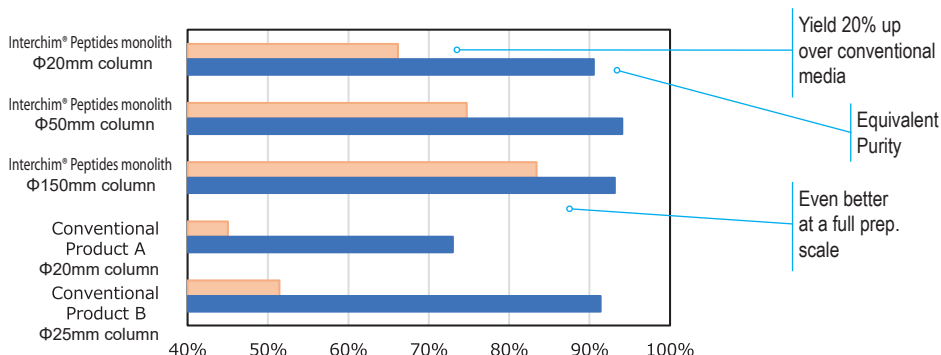
### Enhanced Performance with Any System!

#### # Compatible with Low / Medium Pressure Pump

Even in the reverse phase purification, the pressure of Interchim® Peptides monolith column is as low as 2 bar or less, at a standard flow rate and can be adapted to any low / medium pressure machine like puriFlash® machines and a syringe pump. More over, it is quite easy to improve separation performance by stacking 2 or more columns.

#### # Prep. Scale Can Also Run at Low Pressure

Extremely low pressure profile of Interchim® Peptides monolith column enables very easy scale-up to a semi-preparative or a full preparative column without worrying about the pressure limit. It is already demonstrated in production plant with a column of 150mm in diameter for purification of peptide active substance (about 4kDa), which contains many impurities very difficult to purify.



#### Comparison with Conventional Media in Actual Peptide API Production

(Particle Diameter) Interchim® Peptides monolith: 30µm, Conventional A: 45µm, B: 20µm

(Supported by Hamari Chemicals, Ltd. Japan)



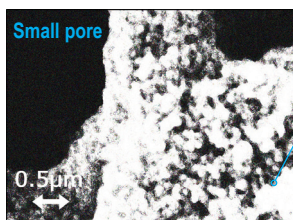
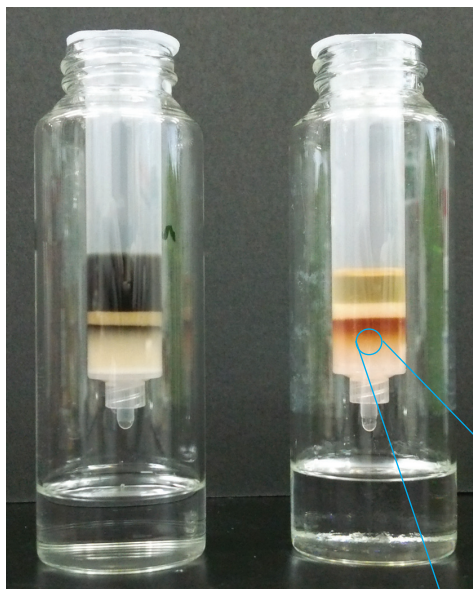
Flash Columns	Stationary Phases	Particle sizes	Column format	Part Number	Qty
	Monolith C18	30µm	F004	PM-30C18-F004	1u
	Monolith C18	30µm	F012	PM-30C18-F012	1u
	Monolith C18	30µm	F025	PM-30C18-F0025	1u
	Monolith C18	30µm	F040	PM-30C18-F0040	1u
	Monolith C18	30µm	F080	PM-30C18-F0080	1u
	Monolith C18	30µm	F0120	PM-30C18-F0120	1u
	Monolith C18	30µm	F0220	PM-30C18-F0220	1u
	Monolith C18	30µm	F0330	PM-30C18-F0330	1u
	Monolith C18	50µm	F004	PM-50C18-F004	1u
	Monolith C18	50µm	F012	PM-50C18-F0012	1u
	Monolith C18	50µm	F025	PM-50C18-F0025	1u
	Monolith C18	50µm	F040	PM-50C18-F0040	1u
	Monolith C18	50µm	F080	PM-50C18-F0080	1u
	Monolith C18	50µm	F0120	PM-50C18-F0120	1u
	Monolith C18	50µm	F0220	PM-50C18-F0220	1u
	Monolith C18	50µm	F0330	PM-50C18-F0330	1u

Prep-LC Columns	Stationary Phases	Particle sizes	Column format	Part Number	Qty
	Monolith C18	15µm	100 x 4.6mm	PM15C18-100/P46	1u
	Monolith C18	15µm	150 x 4.6mm	PM15C18-150/P46	1u
	Monolith C18	15µm	250 x 4.6mm	PM15C18-250/P46	1u
	Monolith C18	15µm	100 x 10.0mm	PM15C18-100/100	1u
	Monolith C18	15µm	150 x 10.0mm	PM15C18-150/100	1u
	Monolith C18	15µm	250 x 10.0mm	PM15C18-250/100	1u
	Monolith C18	15µm	150 x 21.2mm	PM15C18-150/212	1u
	Monolith C18	15µm	250 x 21.2mm	PM15C18-250/212	1u
	Monolith C18	15µm	250 x 30.0mm	PM15C18-250/300	1u
	Monolith C18	30µm	100 x 4.6mm	PM30C18-100/P46	1u
	Monolith C18	30µm	150 x 4.6mm	PM30C18-150/P46	1u
	Monolith C18	30µm	250 x 4.6mm	PM30C18-250/P46	1u
	Monolith C18	30µm	100 x 10.0mm	PM30C18-100/100	1u
	Monolith C18	30µm	150 x 10.0mm	PM30C18-150/100	1u
	Monolith C18	30µm	250 x 10.0mm	PM30C18-250/100	1u
	Monolith C18	30µm	150 x 21.2mm	PM30C18-150/212	1u
	Monolith C18	30µm	250 x 21.2mm	PM30C18-250/212	1u
	Monolith C18	30µm	250 x 30.0mm	PM30C18-250/300	1u

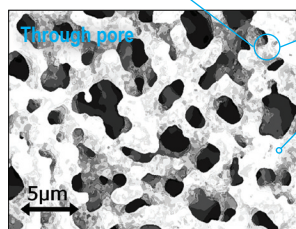


### Crack-Free Controlled Fabrication > 500mL With Sharp Pore Distribution

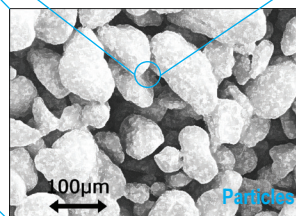
Enabling to Capture down to Sub-ppm Level  
Under Non-Pressure, High-Speed, Flow-Through, Easy Mode



Small pores in nano-size exist inside of silica skeletons



Through pores and silica skeletons in micron-size compose a particle

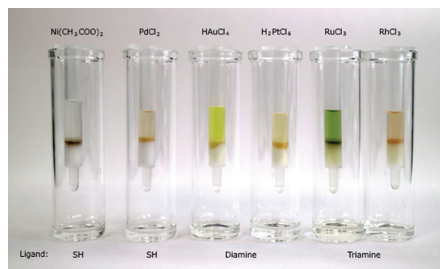


- => Simple capture of metal by a flow-through column: in less than 10 seconds!
- => Very effective thorough removal of target metal: much below 1ppm level

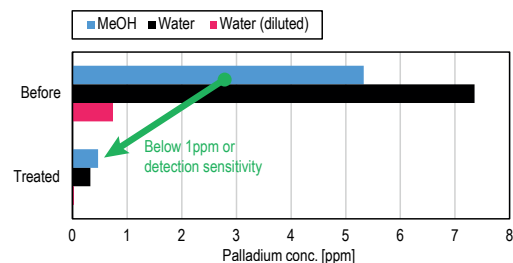
### # Applicable to various metals

Don't you have a difficulty of removing residual metal catalysts?  
Our novel metal scavengers give you a robust solution to capture them much easier, much faster, and very effectively down to a sub-ppm level: Just pass them through a pre-filled open column and that's it!

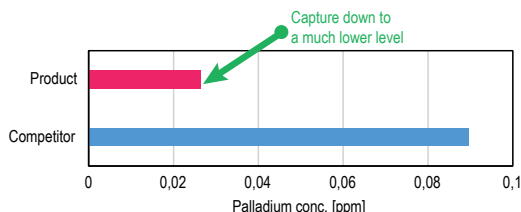
The technology behind is based on a well-proven high-end material as an HPLC column, called monolithic silica.



Examples of Varied Metal Captures by Adsorption



Recovery test of palladium eluted in an actual solution after Sonogashira coupling reaction using SH type column  
Column size:  $\Phi 5.6 \times 10$ mm, Flow volume: 10 ~ 20mL  
Supervised by Prof. Sajiki, Gifu Pharmaceutical University



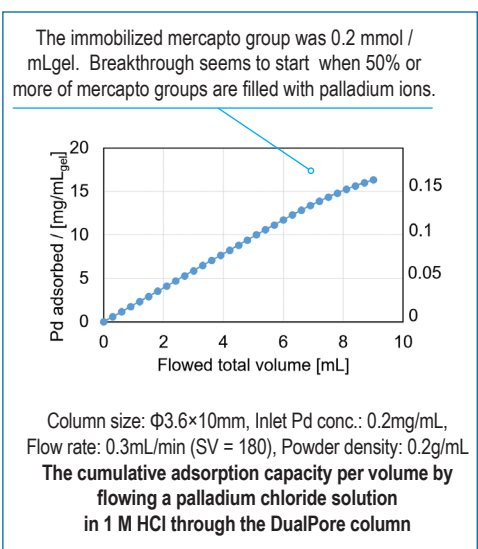
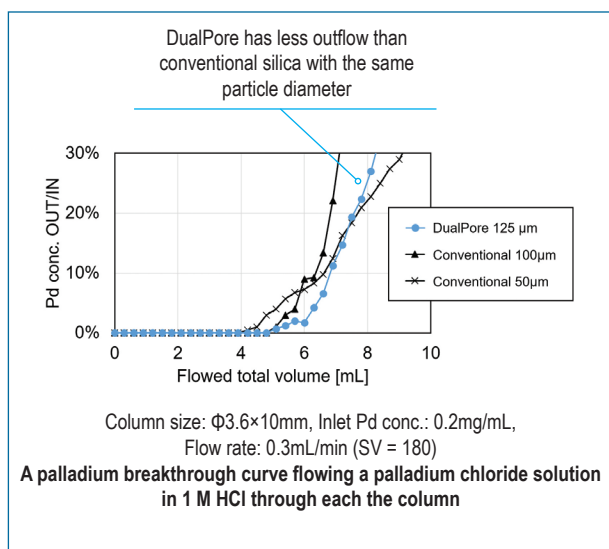
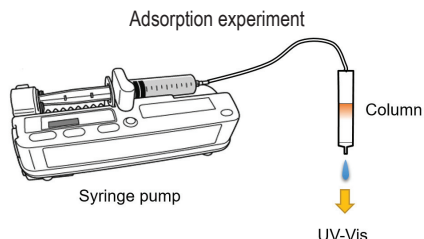
Recovery from palladium (II) chloride solution using SH type column  
Pd conc.: 5ppm, Column: size  $\Phi 4 \times 10$ mm, Solvent: 1M hydrochloric acid Total volume: 10mL, Flow rate: 1mL/min



Since the adsorption equilibrium of the metal is stabilized on the adsorption side, it has a much higher adsorption power than conventional particles and exhibits a higher collecting power even at extremely low concentration. Thus, by a flow-through mode, it enables more effective removal down to a 1/4 or less residual concentration.

### # Pd adsorption from acid solution of PdCl<sub>2</sub>

To assess the absorption capacity, palladium (II) chloride solution of 5 ppm is passed through the Novel High-Performance Metal Scavenger, with a mercapto ligand, and the concentration of palladium ion in the eluate is measured.



Ligand	Ligand/Target metals of adsorption	Loading amount & the structure
SH		0.7-1.5 mmol/g
Mercaptopropyl	Ag, Cu, Pd, Au, Rh etc.	
TMT		0.3-0.6 mmol/g
Trimercaptotriazine	Ag, Cu, Pd, Au, Rh etc.	
Diamine		0.6-0.9 mmol/g
Propyl-N-ethylenediamine	Pd, Pt, Au, Rh, Ru etc.	
Triamine		0.6-0.9 mmol/g
Propyl-N-diethylenetriamine	Pd, Pt, Rh, Sc, In etc.	
TAAcONa		0.3-0.6 mmol/g
Triaminetriacetate sodium salt	Pd, Pt, Rh, Sc, In etc.	
Full set of SH, TMT, Diamine, Triamine, and TAAcONa	Pd, Pt, Rh, Sc, In etc.	0.3-0.6 mmol/g 





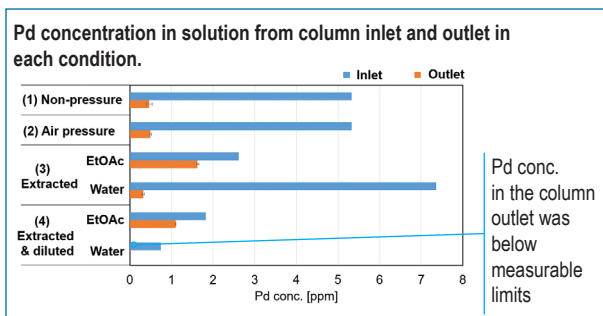
### # Adsorption of eluted Pd from actual catalyzed reaction solution

Recovery experiment of Pd species eluted in the current solution was attempted after Sonogashira coupling reaction using Pd/C. The Sonogashira coupling reaction was carried out in a 50% aqueous 2-propanol and its reaction solution was diluted to 50 mL with methanol and passed through a column with the DualPore silica with a mercapto ligand group under non-pressure (1). In addition, the adsorption behavior of palladium was examined under the following three conditions: (2) Condition in which the same palladium solution was passed through the column under air pressure, (3) condition in which the reaction solution after the Sonogashira coupling reaction was extracted with ethyl acetate and distilled water and passes through in the same as (2), and (4) The extracted solutions of (3) were passed through the column in the same as (2).

High adsorption rate can be attained even in a very short contact time in some case.

**Flow conditions of the experiment**

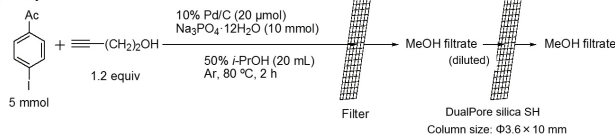
Condition	Solvent	Flow rate (mL/min)	Flowed solution (mL)	Contact time (sec)
(1) Non-pressure	MeOH	0.07	50	107
(2) Air pressure	MeOH	4	10	2
(3) Extracted	EtOAc	10	20	0.8
	Water	3	20	2.5
(4) Extracted	EtOAc	1.3	20	2.5
	Water	3	20	5.8



### After Sonogashira coupling reaction and the treatment method of residual Pd solution

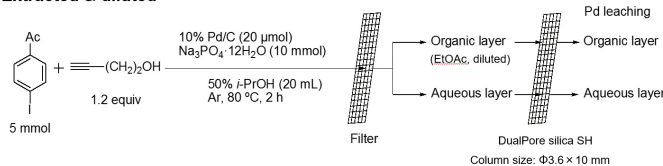
#### (1) Non-pressure

#### (2) Air pressure

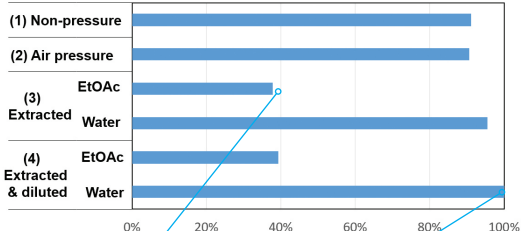


#### (3) Extracted

#### (4) Extracted & diluted



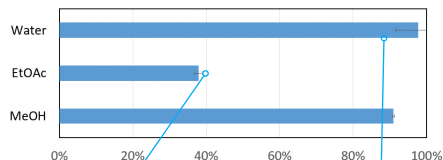
### Adsorption rate of Pd concentrations in column outlet/inlet



Lower adsorption rate from EtOAc layer

Pd was almost 100% adsorbed from the water layer at a low concentration.

### Adsorption rate of Pd concentration with each solvent



The adsorption rate from the hydrophobic organic layer was nearly constant at ~40%

With water or MeOH as solvent, the adsorption rate was remarkable. The adsorption rate did not depend on the flow rate and the initial concentration.



Thiol				
Type	Format	Designation	Part Number	Qty/pack
MS-S	SPE Column	1mL	MS-SH-SPE1	50u
MS-S	SPE Column	3mL	MS-SH-SPE3	50u
MS-S	SPE Column	6mL	MS-SH-SPE6	30u
MS-S	Flash Column	20mL	MS-SH-FC20	1u
MS-S	Flash Column	60mL	MS-SH-FC60	1u
MS-S	Flash Column	150mL	MS-SH-FC150	1u
MS-S	Flash Column	550mL	MS-SH-FC550	1u
MS-S	Flash Column	1600mL	MS-SH-FC1600	1u
MS-L	Bulk	4L /1KG	MS-SH-1KG	1KG
MS-L	Bulk	1L /250G	MS-SH-250G	250G
MS-L	Bulk	400mL /100G	MS-SH-100G	100G
MS-L	Bulk	100mL /25G	MS-SH-25G	25G
MS-L	Bulk	4L /1KG	MS-L-SH-1KG	1KG
MS-L	Bulk	1L /250G	MS-L-SH-250G	250G
MS-L	Bulk	400mL /100G	MS-L-SH-100G	100G
MS-L	Bulk	100mL /25G	MS-L-SH-25G	25G

Triamine				
Type	Format	Designation	Part Number	Qty/pack
MS-S	SPE Column	1mL	MS-3NH-SPE1	50u
MS-S	SPE Column	3mL	MS-3NH-SPE3	50u
MS-S	SPE Column	6mL	MS-3NH-SPE6	30u
MS-S	Flash Column	20mL	MS-3NH-FC20	1u
MS-S	Flash Column	60mL	MS-3NH-FC60	1u
MS-S	Flash Column	150mL	MS-3NH-FC150	1u
MS-S	Flash Column	550mL	MS-3NH-FC550	1u
MS-S	Flash Column	1600mL	MS-3NH-FC1600	1u
MS-L	Bulk	4L /1KG	MS-3NH-1KG	1KG
MS-L	Bulk	1L /250G	MS-3NH-250G	250G
MS-L	Bulk	400mL /100G	MS-3NH-100G	100G
MS-L	Bulk	100mL /25G	MS-3NH-25G	25G
MS-L	Bulk	4L /1KG	MS-L-3NH-1KG	1KG
MS-L	Bulk	1L /250G	MS-L-3NH-250G	250G
MS-L	Bulk	400mL /100G	MS-L-3NH-100G	100G
MS-L	Bulk	100mL /25G	MS-L-3NH-25G	25G

TMT				
Type	Format	Designation	Part Number	Qty/pack
MS-S	SPE Column	1mL	MS-TMT-SPE1	50u
MS-S	SPE Column	3mL	MS-TMT-SPE3	50u
MS-S	SPE Column	6mL	MS-TMT-SPE6	30u
MS-S	Flash Column	20mL	MS-TMT-FC20	1u
MS-S	Flash Column	60mL	MS-TMT-FC60	1u
MS-S	Flash Column	150mL	MS-TMT-FC150	1u
MS-S	Flash Column	550mL	MS-TMT-FC550	1u
MS-S	Flash Column	1600mL	MS-TMT-FC1600	1u
MS-L	Bulk	4L /1KG	MS-TMT-1KG	1KG
MS-L	Bulk	1L /250G	MS-TMT-250G	250G
MS-L	Bulk	400mL /100G	MS-TMT-100G	100G
MS-L	Bulk	100mL /25G	MS-TMT-25G	25G
MS-L	Bulk	4L /1KG	MS-L-TMT-1KG	1KG
MS-L	Bulk	1L /250G	MS-L-TMT-250G	250G
MS-L	Bulk	400mL /100G	MS-L-TMT-100G	100G
MS-L	Bulk	100mL /25G	MS-L-TMT-25G	25G

TAAcONa				
Type	Format	Designation	Part Number	Qty/pack
MS-S	SPE Column	1mL	MS-TAAC-SPE1	50u
MS-S	SPE Column	3mL	MS-TAAC-SPE3	50u
MS-S	SPE Column	6mL	MS-TAAC-SPE6	30u
MS-S	Flash Column	20mL	MS-TAAC-FC20	1u
MS-S	Flash Column	60mL	MS-TAAC-FC60	1u
MS-S	Flash Column	150mL	MS-TAAC-FC150	1u
MS-S	Flash Column	550mL	MS-TAAC-FC550	1u
MS-S	Flash Column	1600mL	MS-TAAC-FC1600	1u
MS-L	Bulk	4L /1KG	MS-TAAC-1KG	1KG
MS-L	Bulk	1L /250G	MS-TAAC-250G	250G
MS-L	Bulk	400mL /100G	MS-TAAC-100G	100G
MS-L	Bulk	100mL /25G	MS-TAAC-25G	25G
MS-L	Bulk	4L /1KG	MS-L-TAAC-1KG	1KG
MS-L	Bulk	1L /250G	MS-L-TAAC-250G	250G
MS-L	Bulk	400mL /100G	MS-L-TAAC-100G	100G
MS-L	Bulk	100mL /25G	MS-L-TAAC-25G	25G

Diamine				
Type	Format	Designation	Part Number	Qty/pack
MS-S	SPE Column	1mL	MS-2NH-SPE1	50u
MS-S	SPE Column	3mL	MS-2NH-SPE3	50u
MS-S	SPE Column	6mL	MS-2NH-SPE6	30u
MS-S	Flash Column	20mL	MS-2NH-FC20	1u
MS-S	Flash Column	60mL	MS-2NH-FC60	1u
MS-S	Flash Column	150mL	MS-2NH-FC150	1u
MS-S	Flash Column	550mL	MS-2NH-FC550	1u
MS-S	Flash Column	1600mL	MS-2NH-FC1600	1u
MS-L	Bulk	4L /1KG	MS-2NH-1KG	1KG
MS-L	Bulk	1L /250G	MS-2NH-250G	250G
MS-L	Bulk	400mL /100G	MS-2NH-100G	100G
MS-L	Bulk	100mL /25G	MS-2NH-25G	25G
MS-L	Bulk	4L /1KG	MS-L-2NH-1KG	1KG
MS-L	Bulk	1L /250G	MS-L-2NH-250G	250G
MS-L	Bulk	400mL /100G	MS-L-2NH-100G	100G
MS-L	Bulk	100mL /25G	MS-L-2NH-25G	25G

5x Ligands				
Type	Format	Designation	Part Number	Qty/pack
MS-S	Kit	1mL	MS-KIT-SPE1	5x5u
MS-S	Kit	3mL	MS-KIT-SPE3	5x5u
MS-S	Kit	6mL	MS-KIT-SPE6	3x5u

5 Ligands				
Type	Format	Designation	Part Number	Qty/pack
MS-S	Kit	5G EA	MS-KIT-5X5G	5X5G
MS-L	Kit	5G EA	MS-L-KIT-5X5G	5X5G