

The Essential Systems & Consumables for
**HIGH PERFORMANCE
LC PURIFICATION
& MASS SPECTROMETRY**

 **interchim[®]**

 **Advion**



Aim high. Discover more. The Advion® x Interchim® unity.

Dear Customers,

Sharing a customer-focused company vision, a taste for excellence with state-of-the-art product solutions and working hand in hand for eight years, it was natural that **Advion®**, a well known player in the world of mass spectrometry and chromatography products, and **Interchim®**, a global provider of instrumentation and consumables for life sciences, research and industry would strengthen their ties to accompany their customers and partners even further.

It is with great joy to announce our commercial combination- a joy that becomes tangible with the first release of our shared catalog dedicated to the essential instruments and consumables for High Performance LC purification.

From sample injection, purification, detection, analysis and more, you have in your hands everything you need to increase the productivity of your laboratory and to achieve expert results daily.

You can also find all our products on our websites www.interchim.com, www.flash-chromatography.com and www.advion.com as well as our application notes and tips and tricks in our blog articles. Both technical and support services from **Interchim®** and **Advion®** remain at your disposal to help you overcome your challenges and to choose the most appropriate product solutions.

From our respective headquarters in France and the United States, our subsidiaries, and our independent distributors network, we thank you for your confidence and we are proud to accompany you in the success of your projects.

Interchim x Advion



"I am really excited about the perspective of this commercial combination with Advion®. As a guarantee of a promising future, it represents today for Interchim®, its customers, suppliers and partners a perfect fit.

The strengths of the two entities, already working together successfully, will be

enhanced by this new step and will enable us to reach and develop unparalleled scientific solutions and technological platforms for our customers around the world."

Lionel Boch, Président du Directoire, Interchim



"I am thrilled to increase collaboration with Interchim®. Our expanded solution deck and global scale will provide a formidable platform for growth – offering novel media, columns, prep LC, HPLC, flash chromatography, mass spectrometry, sample prep, and much more.

Both Advion and Interchim customers

will benefit from an immediately expanded workflow solution portfolio. Our mutual dedication to customer-focused solutions will continue, as will our dedication to world-class service.

Together with Interchim, we have built strong relationships which persist to this day and will continue to flourish with this incredible opportunity for commercial combination."

David B. Patteson, CEO, Advion

“ Interchim and Advion led the market by being the first to develop integrated Flash-MS and seamlessly coupling Advion’s high performance **expression®** Compact Mass Spectrometer with Interchim’s **puriFlash®** purification systems. ”



Advion & Interchim® 2020 Conference Schedule

Join our teams across the globe at an upcoming conference, symposium or trade show. Connect with us in nearby locations to see the instruments live and experience both Interchim and Advion systems. *Please note: this schedule is subject to change.*

January

- . 27-29 - Orleans, France - 4th Chemical Ligation Meeting
- . 28-30 - Dallas, TX - Texas Hemp Convention

February

- . 05-07 - Madrid, Spain - 17th Iberian Peptides Meeting
- . 13-15 - Las Vegas - USA CBD Expo
- . 19-20 - Boston, MA - Northeast Cannabis Business Conference

March

- . 01-04 - Münster, Germany - DGMS
- . 01-05 - Chicago, IL - Pittcon
- . 08-11 - Seattle, WA - US HUPO
- . 11-13 - Münster, Germany - BioChemistry 2020
- . 15-19 - Aussois, France - RECOB - Rencontres en Chimie Organique Biologique
- . 17-20 - Mondonville, France - JIREC - Journées d'Innovation et de Recherche pour l'Enseignement de la Chimie
- . 20-22 - Boston, MA - NECANN
- . 22-25 - Freiburg - Frontiers in Medicinal Chemistry
- . 22-26 - Philadelphia, PA - ACS Spring
- . 26-28 - Denver, CO - NOCO

March - April

- . 29-02 - Palm Springs, CA - MSACL
- . 30-02 - Rennes, France - IGCS/Green Cat - 4th International Green Catalysis Symposium
- . 30-02 - Oxford, MS - ICSB Oxford
- . 31-03 - München - Analytica

April

- . 04-06 - Pueblo, CO - ICR - Institute of Cannabis Research
- . 06-08 - Baltimore, MD - Cannabis Science East
- . 13-16 - Atlanta, GA - SS AOAC (Southern Section)
- . 17-19 - University of Kansas - MIKI Medicinal Chemistry Meeting-in-Miniature
- . 21-23 - Las Vegas - Cannabis conference
- . 27-29 - Montpellier, France - GFPP - Cell-Penetrating Peptides: Next generation delivery systems

May

- . 06-07 - Fort Detrick, Frederic, MD - Biomedical Research Equipment and Supplies Exhibit at Fort Detrick
- . 07-09 - Atlanta, GA - USA CBD Expo
- . 12-13 - Bogota, Colombia - Cannacienca
- . 12-14 - Boston, MA - TIDES
- . 28-30 - New York - CWBC
- . 18-19 - Midlothian, VA - VADCC - VirginiaDrugDiscoveryRx: Targets to Translation
- . 20-21 - Bethesda, MD - NIH Spring Biomedical Research Exhibit
- . 24-28 - Winnipeg, Canada - Canadian Chemistry Conference
- . 24-28 - Camaret Sur Mer, France - GECOM-CONCOORD - chimie organométallique et à la chimie de coordination
- . 27-29 - Columbus, OH - CERM
- . 28-29 - Marseille, France - RCOM - Rencontre de Chimie Organique de Marseille

May - June

- . 31-04 - Houston, TX - ASMS

June

- . 11-12 - Marseille, France - SFST - Symposium Francophone de Synthèse Totale
- . 12 - New York, NY - MARM
- . 15-18 - San Diego, CA - 17th International Congress on Catalysis
- . 21-24 - Krakow, PL - Polish-Czech Mass Spectrometry Meeting, PCMSM
- . 28 - Bellingham, WA - NORM

June - July

- . 28-01 - New York, NY - NMCS - National Medicinal Chemistry Symposium, ACS

July

- . 05-09 - Prague, CZ - EPHAR 8th European Congress of Pharmacology Tentative
- . 05-10 - Namur, Belgium - BOSS XVII 17th Belgian Organic Synthesis Symposium
- . 07-10 - Nancy, France - MBP - International Conference on Metal-Binding Peptides: Methodologies and Applications
- . 18-23 - Corvallis, OR - BCCE
- . 25-30 - San Francisco, CA - ICNPR 10th International Congress of Natural Products Research
- . 26-29 - Fort Lauderdale, FL - NACRW

August

- . 06-08 - Uncasville CT - USA CBD Expo
- . 14-15 - Nashville - Southern Hemp Expo
- . 16-18 - San Francisco - ACS
- . 23-28 - Cap d'Agde, France - GECO - Groupe d'Etudes en Chimie Organique

August - September

- . 29-04 - Rio De Janeiro - IMSC - International Mass Spectrometry Conference
- . 30-03 - Lisbon, Portugal - EuChemS
- . 31-02 - Portland, OR - Cannabis Science West

September

- . 06-10 - Base - EFMC-ISMIC 2020
- . 07-09 - Münster - Orchem
- . 21-24 - Boulder, CO - Boulder Peptide Symposium
- . 21-22 - Pasadena - Cannmed

September - October

- . 29-02 - Regensburg - Joint 8th European Lipidomics Meeting - 6th Lipidomics Forum - Tentative

October

- . 07-08 - Lausanne, CH - ILMAC
- . 18-21 - Rochester, NY - NERM
- . 21-23 - Springfield, MO - MWRM Midwest Regional Meeting ACS
- . 22-23 - Beatenberg, CH - SGMS Meeting
- . 22-23 - Leipzig - DPhG
- . 29-30 - Las Vegas, NV - Supply Side West

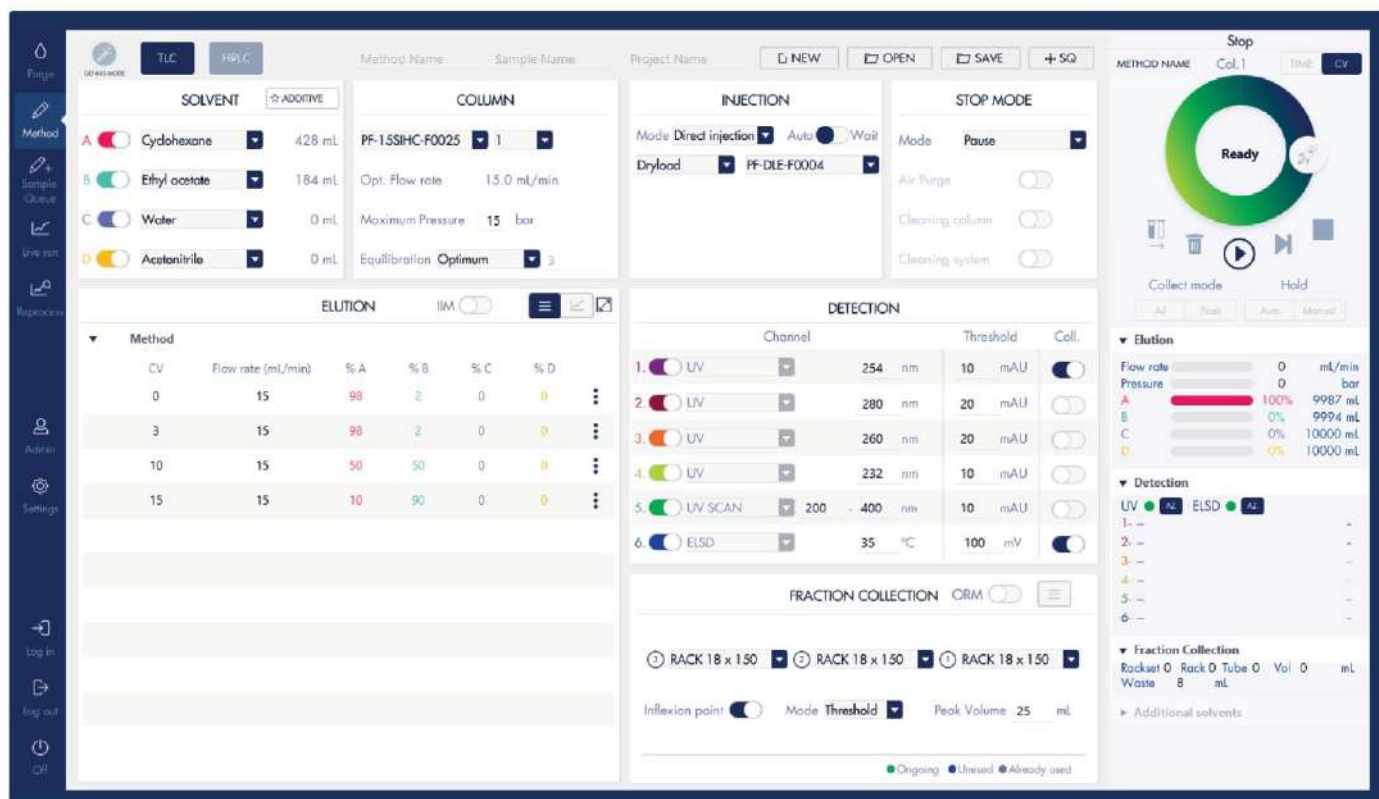
November

- . 08-11 - US Hemp Growers Conf. Seed to sale - Tentative Event
- . 16-18 - Princeton, NJ - Eastern Analytical Symposium

December

- . 11-13 - USA CBD Expo - Tentative Event
- . 15-20 - Honolulu, HI - Pacificchem 2020 (every 5 years)
- . 16-18 - Las Vegas, NV - MJBizCon

InterSoft® X

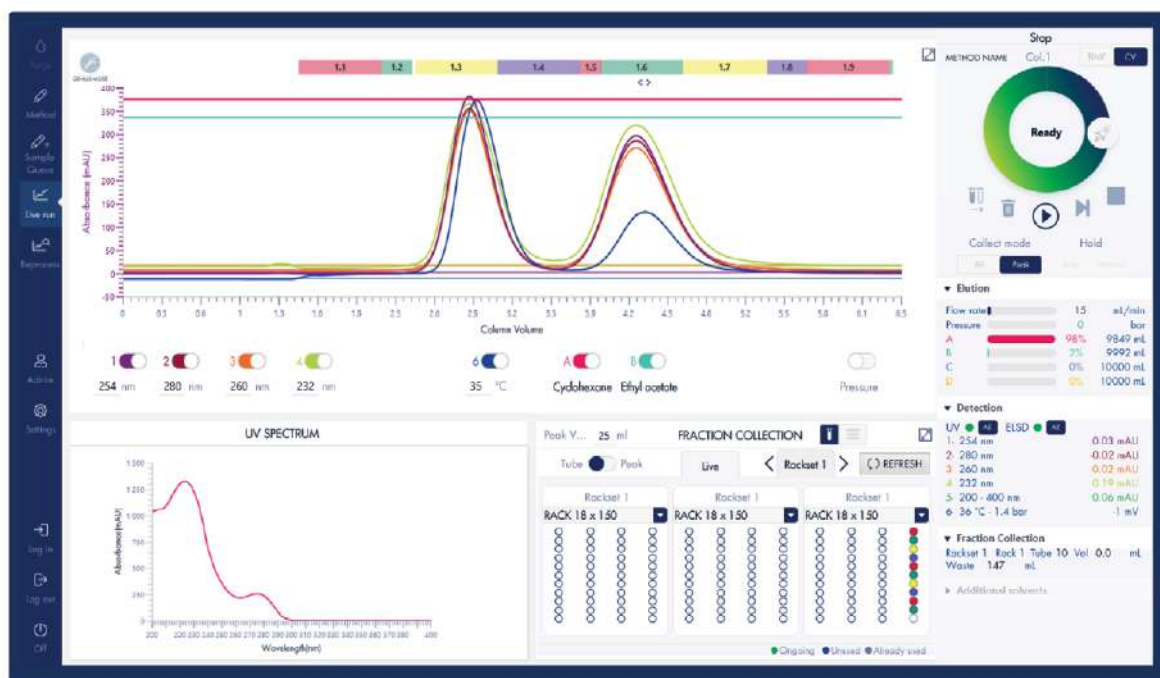


- Accessibility of multi-profile users with minimum training
- Best-in-class design that makes the chemist's life easier
- Challenge Genius, your Personal Artificial Intelligence, to develop the purification method, or do it yourself
- "Push the boundaries" with the intuitive Flash&Go, Load&go and Boost&Go technologies

Genius

Whatever your sample, from any of NP-TLC, NP-LC, NP-LC screening, RP-LC, RP-LC screening experiments, Genius, your Personal Artificial Intelligence embedded in InterSoft® X, generates the best possible purification method in current knowledge. Safely run the method and get your products pure!

Keeps Intelligence Simple, Smart



Flash&Go:

Flash your TLC plate using our mobile app., send the data automatically to InterSoft® X "Genius". You are set to run the purification.



Load&Go:

Load your sample liquid or solid through multi-way electrical valve. InterSoft® X "Genius" will manage column equilibration for you, sample loading and system cleaning.

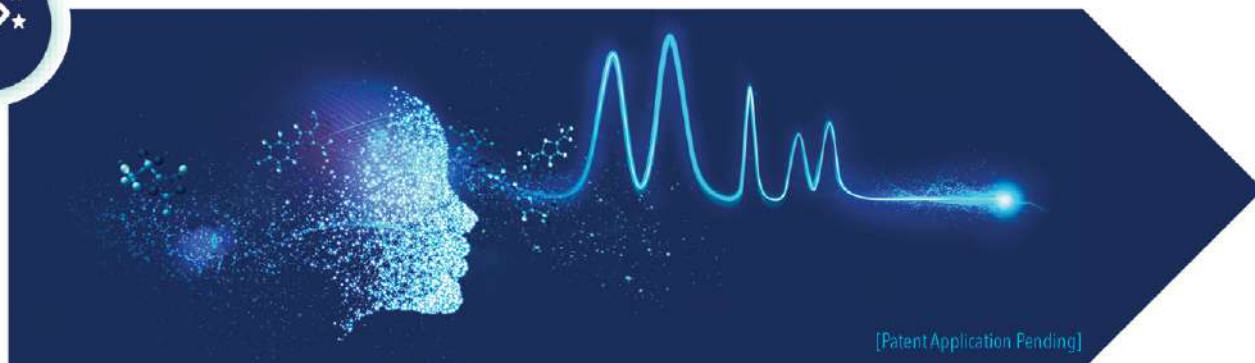


Boost&Go:

Intelligent management of the flow rate increase to safely speed up the purification.



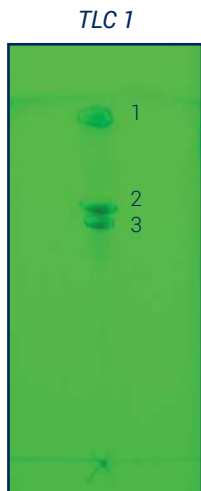
Flash & Prep columns, dry-loads, racks, loops identification & data implementation into Genius.



[Patent Application Pending]

Genius makes Easy & Secured Purifications

1. TLC method development



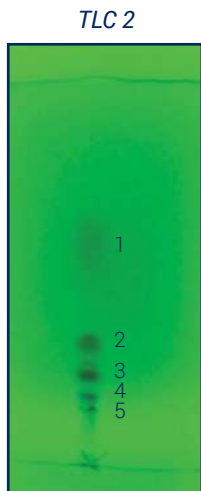
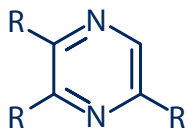
Mobile phase:
87% DCM / MeOH 13%

Compound	Rf	CV
1	0.95	1.05
2	0.68	1.47
3	0.64	1.56

$$\Delta CV_{3-2} = 0.09$$

Rf of compounds 2 and 3 are close, the separation will not be optimal on Flash column.

Genius provides new TLC conditions (TLC 2) in order to increase ΔRf & ΔCV .



Mobile phase:
90% Toluene / MeOH 10%

Compound	Rf	CV
1	0.57	1.75
2	0.31	3.23
3	0.25	4
4	0.18	5.56
5	0.14	7.14

2. Genius proposal



Among the columns proposed by Genius, we have selected a PF-15SIHP-F0012, which was available in stock:

TLC to Flash & Prep (Normal Phase)

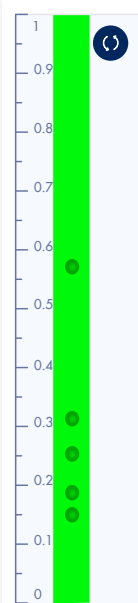
↑ UPLOAD

↺ RESET

Crude sample 100 mg

Solvent 1 Toluene 90 % Additive ☐

Solvent 2 Methanol 10 % Additive ☐



Select your compound(s) of interest

Rf 0.57 ☒
Rf 0.31 ☒
Rf 0.25 ☒
Rf 0.18 ☒
Rf 0.14 ☒

SELECT A COLUMN

Column	Stock
PF-30SIHP-F0012	☒
PF-15SIHP-F0012	☒
PF-30SIHP-F0025	☒
PF-30SIHP-F0040	☒
PF-30SIHP-F0080	☒
PF-30SIHP-F0120	☒

Top 3 columns

INJECTION MODE

The crude is fully soluble in the below conditions:

Toluene 98.9%

Methanol 1.1%

☐ Yes ☒ No

Liquid mL (max 1.66 mL)

Dry load PF-DLE-F0004

GO TO MANUAL METHOD

GO TO RUN



3. Flash conditions

Device: puriFlash® 5.020

Solvents: A: Toluene

B: Methanol

Column: PF-15SIHP-F0012

Flow rate: 15mL/min

Injection mode: Solid deposit with celite
(Dry-load F0004)

Crude sample: 100mg

Detection: UV 265nm

Pressure: 4bar

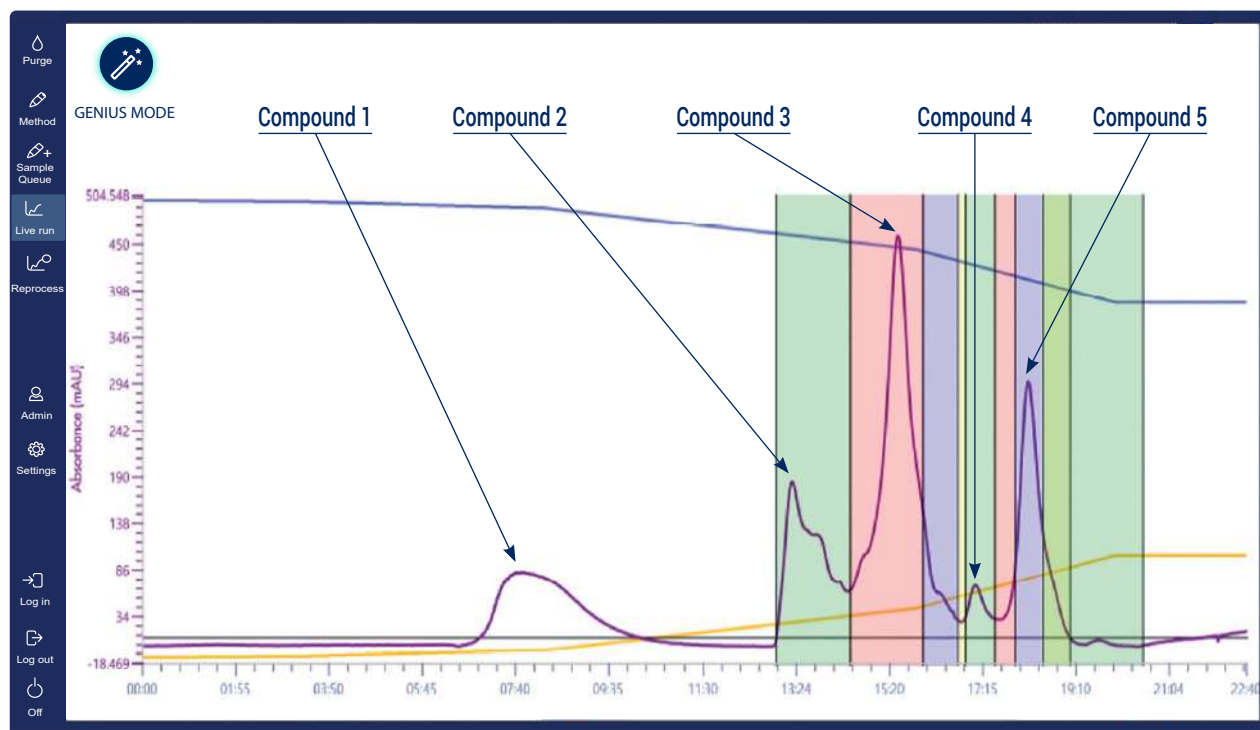
Elution conditions:

t (min)	A (%)	B (%)
00:00	98.9	1.1
03:27	98.6	1.4
08:17	97.3	2.7
15:52	88.4	11.6
20:00	77	23
26:13	77	23



puriFlash® 5.250

Small, but Limitless
250mL/min@up to 250bar



Ultra Performance Flash Purification



puriFlash[®] XS 520Plus

Small, but Mighty
300mL/min@up to 20bar



puriFlash[®] 5.020

The Partner of Daily Challenges
300mL/min@up to 20bar



puriFlash[®] 5.050

Cross-over Flash /Prep
250mL/min@up to 50bar

puriFlash[®]



puriFlash[®] 5.020-5X

Lab-Productivity
300mL/min@up to 20bar



puriFlash[®] 535-XL

Process-Kilo-Lab
400mL/min@up to 35bar



puriFlash[®] 5.015-XL

Process - Kilo-Lab
825mL/min@up to 15bar

Process Purification

Ultra High Performance Purification



puriFlash® 5.125

Complex Purifications with Confidence
250mL/min@up to 125bar



puriFlash® 5.250

Small, but Limitless
250mL/min@up to 250bar



puriFlash® 5.400

The Ultra-Purification
125mL/min@up to 400bar



Accuracy



Flash
& Go



Load
& Go



Boost
& Go



puriFlash® 5.125P

The Peptides Specialist
250mL/min@up to 125bar



puriFlash® 5.250P

Purification of Complex
Mixtures of Peptides
125mL/min@up to 250bar



puriFlash® UP³

Ultra Performance
Proteins Purification
100mL/min@up to 50bar

Peptides & Proteins Purification

Ultra Performance Flash Purification

puriFlash® XS 520Plus

Small Organic molecules
Impurities Identification
Natural Products
Peptides, Oligonucleotides
Proteins, Bio-drugs
Metabolites Isolation
Traces Enrichment



Small but mighty

Concentrated technology for unmatched performance.

Designed for routine flash purifications, the technology and unique quality of the pump will take you much further. Increase the pressure, the puriFlash® XS 520Plus will nevertheless offer precision, linearity and repeatability and allows you to perform complex and sophisticated purifications.

No matter whether you're an expert or not, Genius will support you to achieve the best purification possible.



Accuracy
& Repeatability

up to
800G

300
mL/min

20
bar

InterSoft® X
"Genius" Artificial Intelligence embedded
User-friendly
Click & Drag Gradient
Intelligent Isocratic Mode

Unit Control
15" touch screen
Remote Control
USB x4

Solvent tray w/drainage system

Injection
Liquid or Dry-Load injection
w/column equilibration.

Load
& Go an automated
4 port electric PPS valve
manages solid injection
(Dry-Load)

Fraction Collector
2 long racks
112 tubes 18x150mm
Drainage system
Fume enclosure

Quaternary Gradient Pump
Air purge

PF-XS 520Plus + pack_Ultra

Modular & Easy to Maintain
Built to last

Column i.d. up to
=> 90mm

Smallest footprint
on the market

Detection
PF-XS 520Plus => UV: 200-400nm
(Multi wavelength & Scan collection
Spectral view & Purity confirmation)
Flow Cell: 0.3mm / 40µL

Integrated flash columns holder

=> UV: 200-800nm

P/N: PFXS50



Flash
& Go



Boost
& Go



Accuracy
& Repeatability

up to
800G

300
mL/min

20
bar

puriFlash® 5.020

The partner of daily challenges

Access automation and more security. Thanks to embedded technology (RFID, leak & level sensors, ...) the working time is now devoted entirely to purification and no longer to the management of the instrument.

Small Organic molecules	★★★★★
Impurities Identification	★★★★☆
Natural Products	★★★★★
Peptides, Oligonucleotides	★★★★☆
Proteins, Bio-drugs	★★★★☆
Metabolites Isolation	★★★★☆
Traces Enrichment	★★★★★

InterSoft® X
"Genius" Artificial Intelligence embedded
User-friendly
Click & Drag Gradient
Intelligent Isocratic Mode

Unit Control
15" touch screen
Remote Control
USB x8 - RJ45

Solvent tray w/drainage system

Pre-columns holder

Quaternary Gradient Pump
Air purge

Fraction Collector
3 racks Gen5
132 tubes 18x150mm
Drainage system
Fume enclosure

Injection
Liquid or Dry-Load injection
w/column equilibration.

Load & Go™ technology:
an automated
4 port electric PPS valve
manages solid injection

Column i.d. up to
=> 90mm

Modular & Easy to Maintain
Built to last

Safety:
Leak detection
Solvent & waste level monitoring

Integrated flash columns
& pre-columns holder

Detection
UV: 200-400nm

Pack-UVextended: UV: 200-800nm
(Multi wavelength & Scan collection
Spectral view & Purity confirmation)

Flow Cell: 0.3mm / 40µL

Pack-iELSD



Flash
& Go



Load
& Go



Boost
& Go



RFID

puriFlash® 535-XL **NEW**

Small Organic molecules	★★★★★
Impurities Identification	★★★★☆
Natural Products	★★★★☆
Peptides, Oligonucleotides	★★★★☆
Proteins, Bio-drugs	★★★★☆
Metabolites Isolation	★★★★☆
Traces Enrichment	★★★★★



Accuracy
& Repeatability

up to
1600G

400
mL/min

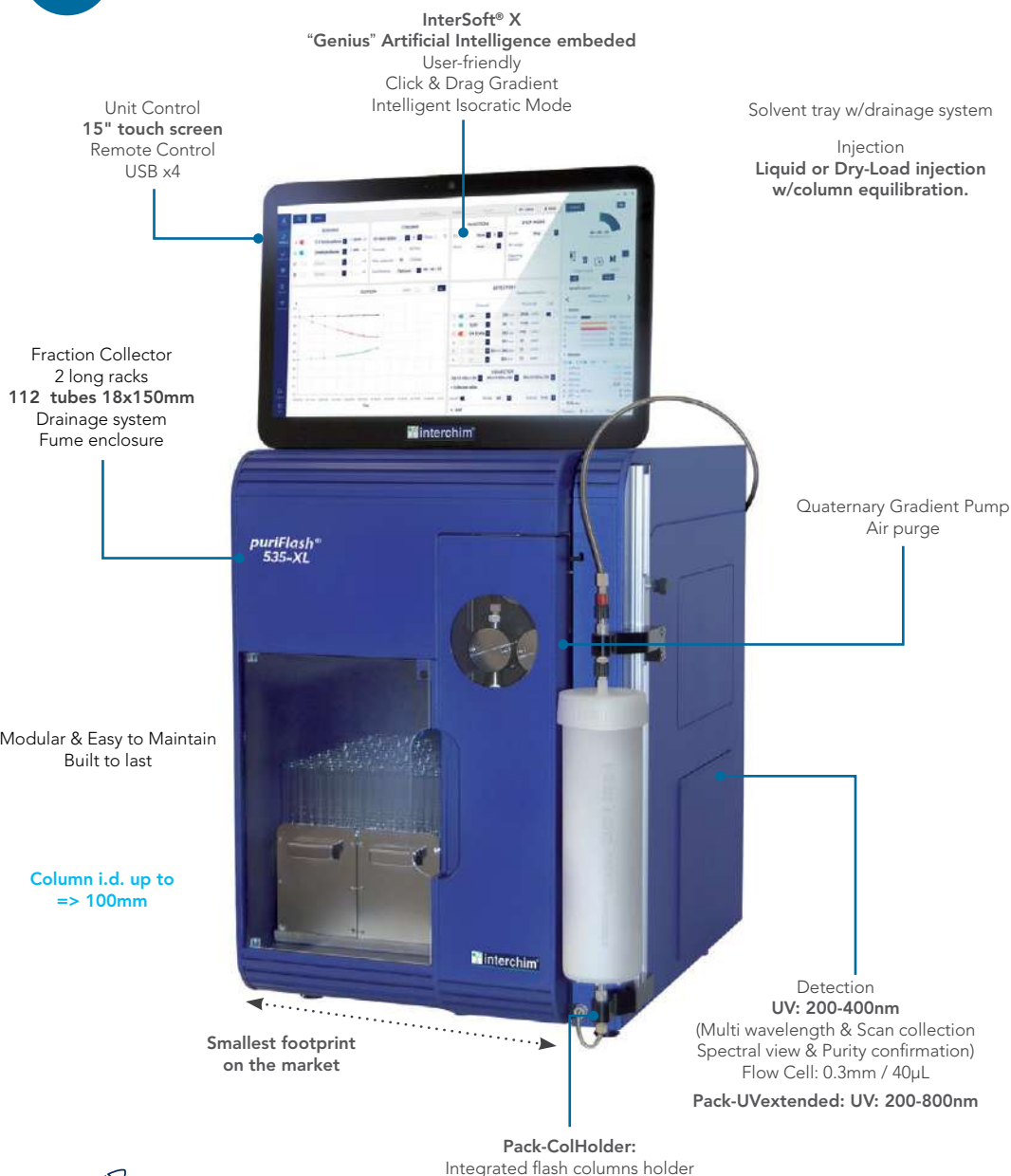
35
bar

Process - Kilo-Lab

Reliability and robustness with significant loading capacity

Its reliability and robustness over time, as well as security features are the essential assets to make semi-continuous productions effective with up to hundreds of grams of the compound of interest.

Continuity of production on the same device independently of the scale-up factor.



Flash
& Go



Boost
& Go



Accuracy
& Repeatability

up to
150mm i.d.
Col.

825
mL/min

15
bar

puriFlash® 5.015-XL

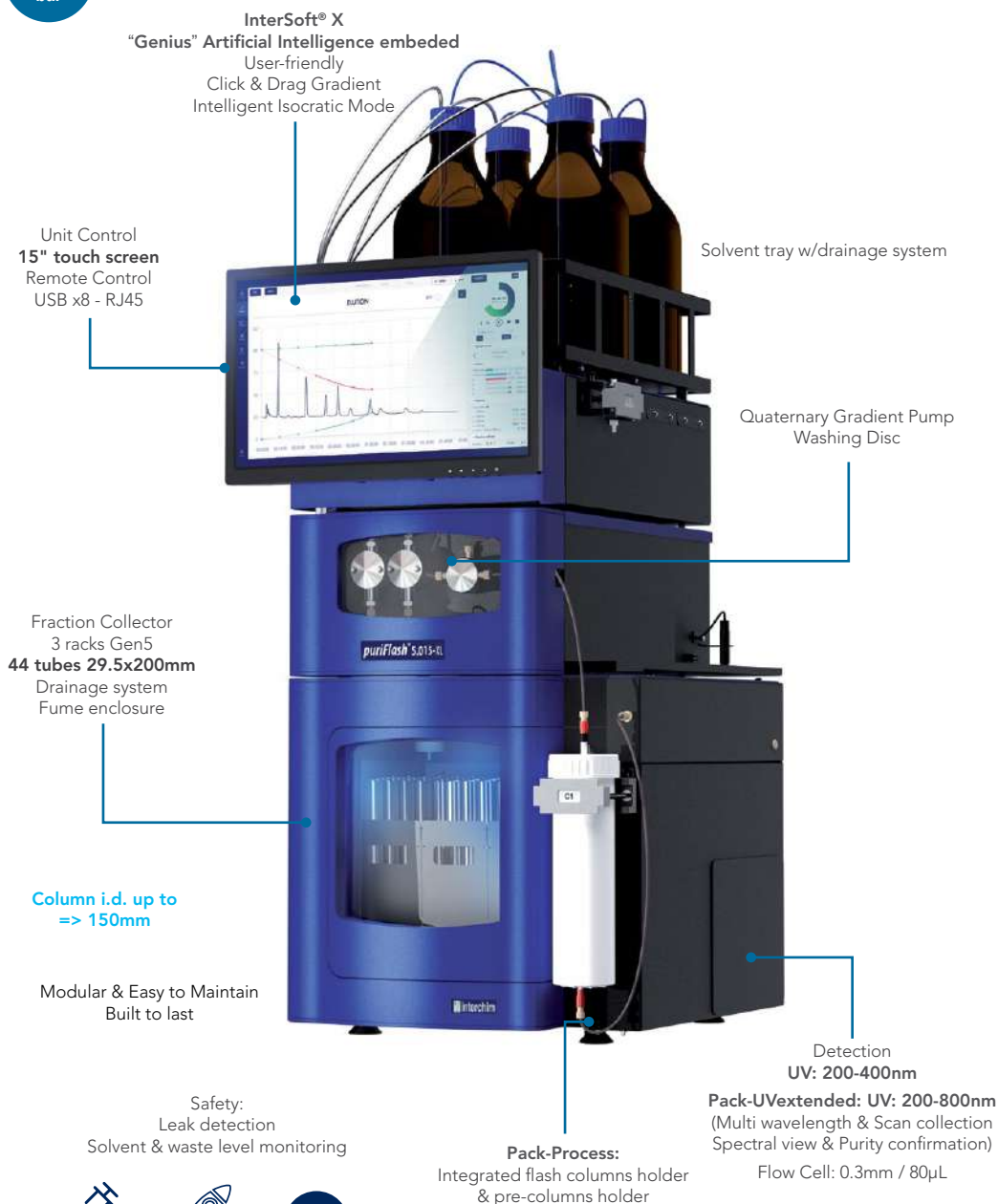
Process - Kilo-Lab

Reliability & robustness with significant loading capacity.

Its reliability, its robustness over the time as well as its security features are the essential assets to make semi-continuous productions effective up to Kgs of compound of interest.

Continuity of production on the same device independently of the scale-up factor.

Small Organic molecules	★★★★★
Impurities Identification	☆☆☆☆☆
Natural Products	★★★★☆
Peptides, Oligonucleotides	★★★★☆
Proteins, Bio-drugs	★★★★☆
Metabolites Isolation	★★★★☆
Traces Enrichment	★★★★★



Flash
& Go



Load
& Go



Boost
& Go



RFID

P/N: PFG5L0

Ultra Performance Flash Purification

	Flash Purification PF-XS 520Plus*			Flash Purification PF-5.020
Pump				
Flow rate	300mL/min			300mL/min
Pressure max.	20bar			20bar
Quaternary Gradient	yes			yes
Air purge	yes			yes
Washing discs	no			no
Pump washing discs (pack)	no			no
Detector	*Plus	_UVextended	_Ultra	
UV: 200 - 400nm multi wavelength & scan collection	yes	no	no	yes
UV: 200 - 800nm multi wavelength & scan collection	no	yes	yes	pack-UVextended
Spectral view & purity confirmation		yes		yes
iELSD Detection (pack)		no		pack-iELSD
pH/Conductimeter		no		no
Injection	*Plus	_UVextended	_Ultra	
4 port electrical valve	no	no	yes	yes
6 port electrical valve w/loop		no		no
6 port + 10 port electrical valves w/loop		no		no
Injection mode: liquid - Dry-Load		yes		yes
Column Selection valve				
14 port /6 position electrical valve		no		no
6 port electrical valve		no		no
System Optimization				
Tubings - after pump	1/8" x 1.6mm id			1/8" x 1.6mm id
Flow cell-optical length	0.3mm/40µL			0.3mm/40µL
Columns Holder				
Integrated	yes			yes
Pre-column holder	no			yes
Fraction Collector				
Regular Collector	2 long racks 112 tubes 18x150mm			3 racks Gen5 132 tubes 18x150mm
Unit control				
Touch screen 15"	yes			yes
USB	4			8
RJ45	yes			yes
Software				
Intersoft® X	yes			yes
Safety				
Leak detection (pump, FC, iELSD, holders)	no			yes
Solvent tray w/drainage system	yes			yes
Collector w/drainage sytem	yes			yes
Solvent level monitoring	no			yes
RFID	no			yes
Fume Encloser	yes			yes
Size				
	W: 14" - 35.5cm D: 18.5" - 47cm H: 30" - 77cm			W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm

Process Purification

Flash Purification PF-5.050	Flash Purification Process PF-5.020-5X	Flash Purification Process PF-535-XL NEW	Flash Purification Process PF-5.015-XL
250ml/min	300mL/min	400mL/min	825mL/min
50bar	20bar	35bar	15bar
yes	yes	yes	yes
yes	yes	yes	no
yes	no	no	yes
no	no	no	no
yes	yes	yes	yes
pack-UVextended	pack-UVextended	pack-UVextended	pack-UVextended
yes	yes	yes	yes
pack-iELSD	pack-iELSD	no	no
no	no	no	no
no	no	no	no
yes	yes	no	no
no	no	no	no
yes	yes	yes	yes
no	yes	no	no
no	no	no	no
1/8" x 1.6mm id	1/8" x 1.6mm id	1/8" x 1.6mm id	1/8" x 2.4mm id
0.3mm/40µL	0.3 mm/40µL	0.3mm/40µL	0.3mm/80µL
yes	yes	pack-ColHolder	pack-Process
yes	no	no	pack-Process
3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm	2 long racks 112 tubes 18x150mm	3 racks Gen5 42 tubes 29.5x200mm
yes	yes	yes	yes
8	8	4	8
yes	yes	yes	yes
yes	yes	yes	yes
yes	yes	no	yes (except holders)
yes	yes	yes	yes
yes	yes	yes	yes
yes	yes	no	yes
yes	yes	yes	yes
W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 14" - 35.5cm D: 18.5" - 47cm H: 30" - 77cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm

Ultra High Performance Purification

puriFlash® 5.250

Small Organic molecules	★★★★★
Impurities Identification	★★★★★
Natural Products	★★★★★
Peptides, Oligonucleotides	★★★★☆
Proteins, Bio-drugs	★★★★☆
Metabolites Isolation	★★★★★
Traces Enrichment	★★★★★



up to
80mm i.d.
Col.

250
mL/min

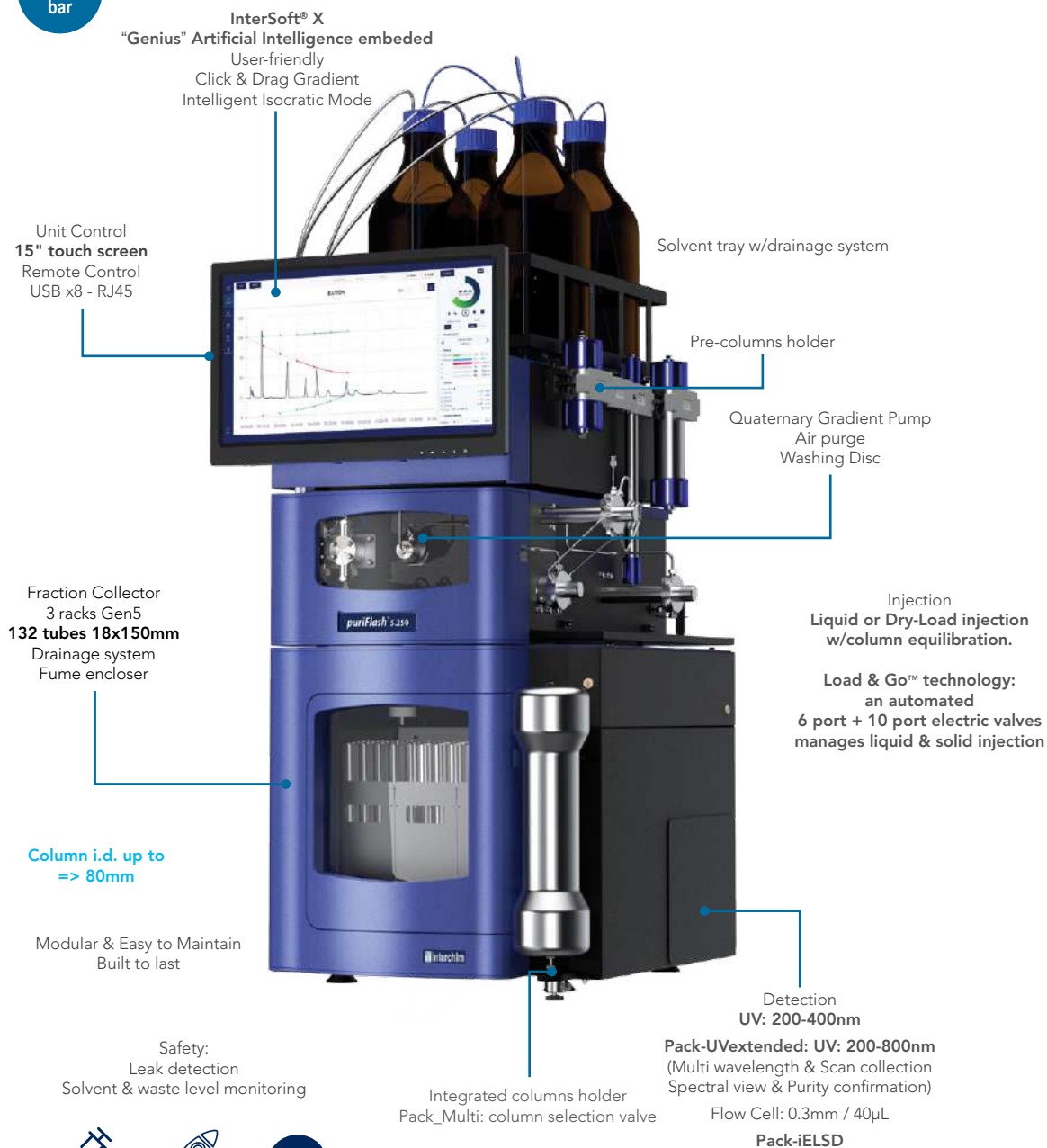
250
bar

Small but limitless

Maximum Versatility and Flexibility.

The system brings a unique performance in all circumstances. It adapts to all needs from routine purification to complex mixtures, impurity separation, or trace enrichment.

It is continuously ready to start multiple purifications in normal or reverse phase, flash or prep.





up to
60mm i.d.
Col.

125
mL/min

400
bar

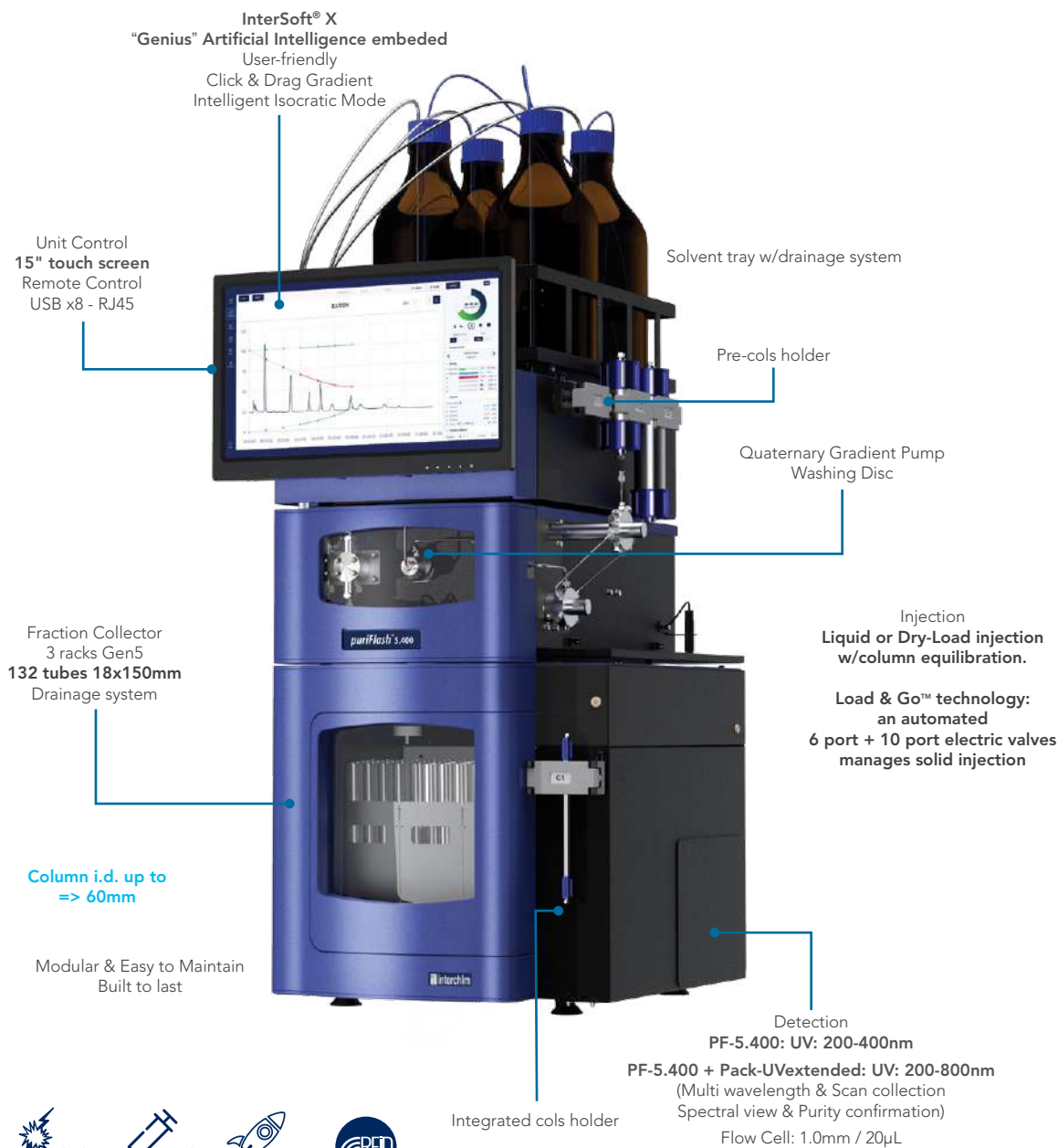
puriFlash® 5.400 **NEW**

Small Organic molecules	★★★★★
Impurities Identification	★★★★★
Natural Products	★★★★★
Peptides, Oligonucleotides	★★★★☆
Proteins, Bio-drugs	★★★☆☆
Metabolites Isolation	★★★★★
Traces Enrichment	★★★★★

The Ultra-Purification

Method development and purification of rare and high added value compounds.

From method development to purification on the same instrument, the system offers more flexibility, saving time. It is compatible with a sub-2 micron column for maximum separating power.



P/N: PFG5F0

Advion interchim

	Preparative PF-5.125	Preparative PF-5.250	Ultra-Prep PF-5.400 LWP
Pump			
Flow rate	250mL/min	250mL/min	125mL/min
Pressure max.	125bar	250bar	400bar
Quaternary Gradient	yes	yes	yes
Air purge	yes	yes	no
Washing discs	yes	yes	yes
Pump washing discs (pack)	pack-PWD	pack-PWD	pack-PWD
Detector			
UV: 200 - 400nm multi wavelength & scan collection	yes	yes	yes
UV: 200 - 800nm multi wavelength & scan collection	pack-UVextended	pack-UVextended	pack-UVextended
Spectral view & purity confirmation	yes	yes	yes
iELSD Detection (pack)	pack-iELSD	pack-iELSD	
pH/Conductimeter	no	no	no
Injection			
4 port electrical valve	no	no	no
6 port electrical valve w/loop	yes	no	no
6 port + 10 port electrical valves w/loop	no	yes	yes (1/16" & 0.75mm)
Injection mode: liquid - Dry-Load	yes	yes	no
Column Selection valve			
14 port /6 position electrical valve	no	no	no
6 port electrical valve	pack-Multi	pack-Multi	no
System Optimization			
Tubings - after pump	1/8" x 1.6mm id	1/8" x 1.6mm id	55 - 1/16" x 0.50mm id
Flow cell-optical length	0.3mm/40µL	0.3mm/40µL	1.0mm/20µL
Columns Holder			
Integrated	yes	yes	yes
Pre-column holder	yes	yes	no
Fraction Collector			
Regular Collector	3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm
Unit control			
Touch screen 15"	yes	yes	yes
USB	8	8	8
RJ45	yes	yes	yes
Software			
Intersoft® X	yes	yes	yes
Safety			
Leak detection (pump, FC, iELSD, holders)	yes	yes	yes
Solvent tray w/drainage system	yes	yes	yes
Collector w/drainage sytem	yes	yes	yes
Solvent level monitoring	yes	yes	yes
RFID	yes	yes	yes
Fume Encloser	yes	yes	yes
Size			
	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm

Peptides Purification

puriFlash® 5.250P

Small Organic molecules	★★★★☆
Impurities Identification	★★★★★
Natural Products	★★★★★
Peptides, Oligonucleotides	★★★★★
Proteins, Bio-drugs	★★★★☆
Metabolites Isolation	★★★★★
Traces Enrichment	★★★★★



up to
60mm i.d.
Col.

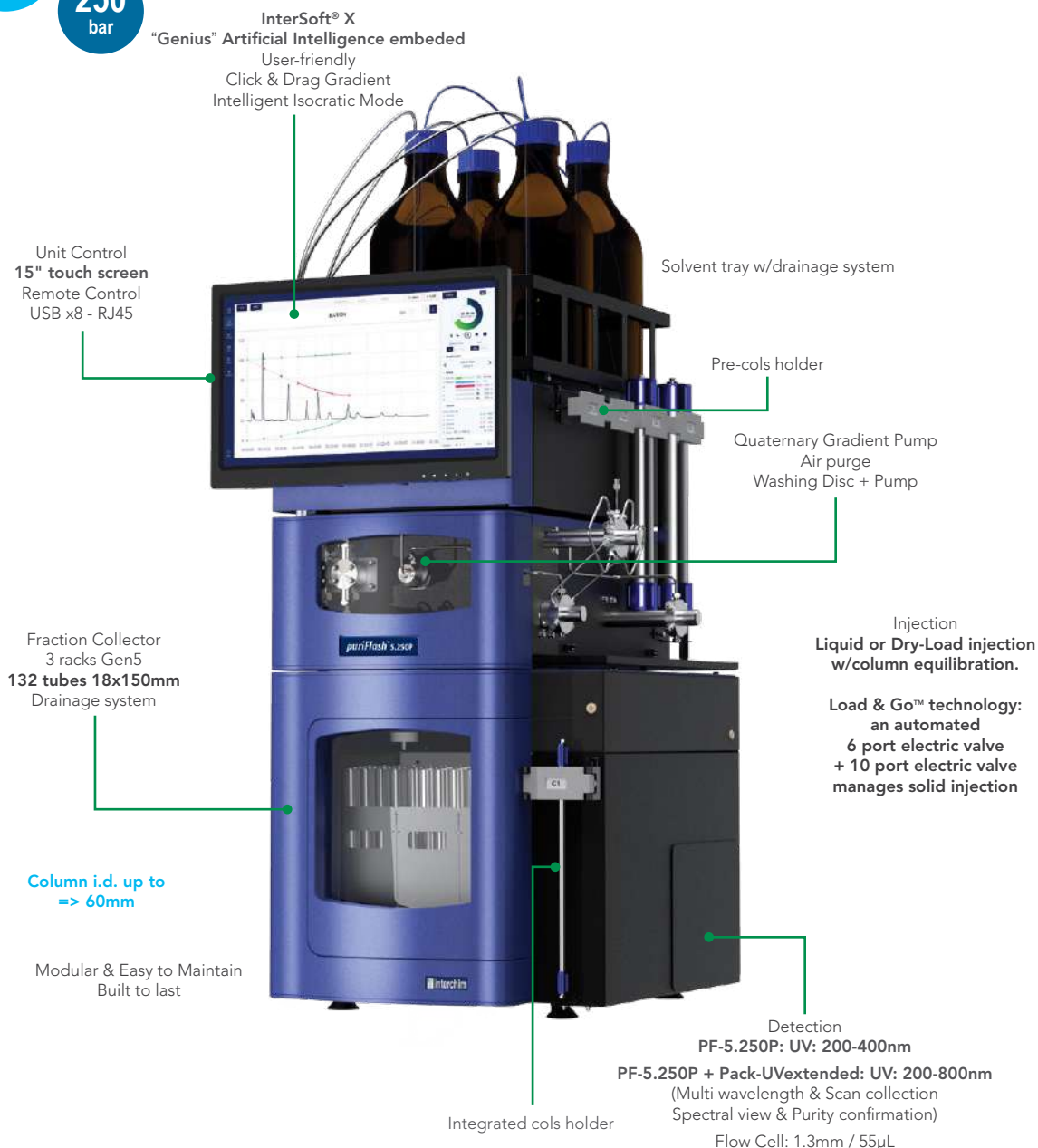
125
mL/min

250
bar

Purification of complex mixtures of peptides

Maximum efficiency.

The use of small particle size combined with the reduction of dead volume makes it possible to discriminate nearby peptides in terms of amino acid sequence.



puriFlash® UP³ **NEW**

Small Organic molecules	★★★★★
Impurities Identification	★★★★★
Natural Products	★★★★★
Peptides, Oligonucleotides	★★★★★
Proteins, Bio-drugs	★★★★★
Metabolites Isolation	★★★★★
Traces Enrichment	★★★★★



Accuracy
& Repeatability

up to
50mm i.d.
Col.

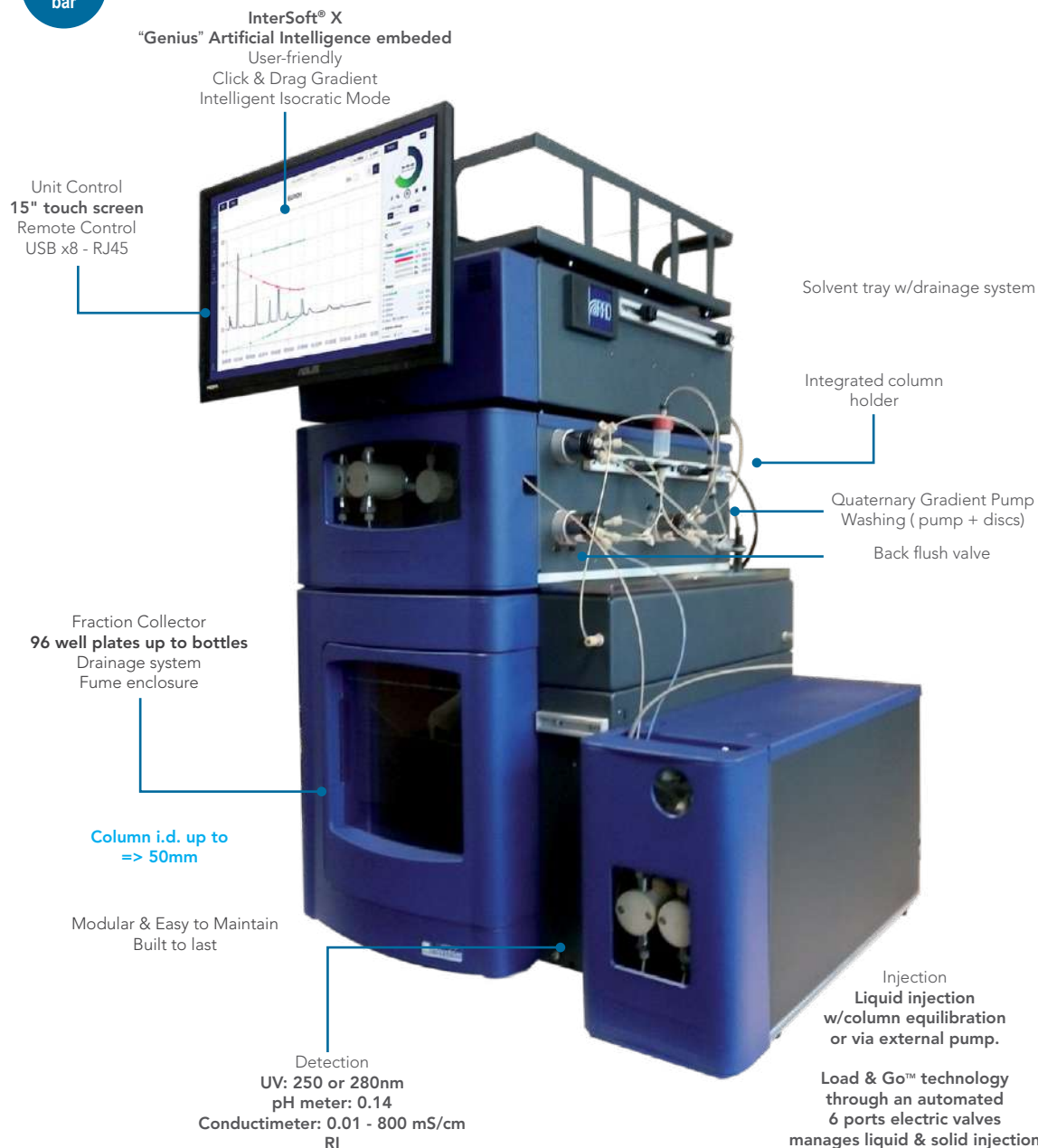
100
mL/min

50
bar

UP³ - Ultra Performance Proteins Purification

Open new horizons in method development and purification of proteins.

A single user-friendly instrument that provides more capabilities and flexibility, saving time. Compatible with 100% of existing SEC, IEX, affinity low and medium pressure bio-columns.



	Peptides & Oligonucleotides PF-5.125P	Peptides & Oligonucleotides PF-5.250P	Proteins Purification UP ³ NEW
Pump			
Flow rate	250mL/min	125mL/min	100mL/min
Pressure max.	125bar	250bar	50 bar
Quaternary Gradient	yes	yes	yes
Air purge	yes	yes	no
Washing discs	yes	yes	yes
Pump washing discs (pack)	yes	yes	yes
Detector			
UV: 200 - 400nm multi wavelength & scan collection	yes	yes	254 nm & 280 nm 200-to-400 nm as an option*
UV: 200 - 800nm multi wavelength & scan collection	pack-UVextended	pack-UVextended	no
Spectral view & purity confirmation	yes	yes	*pack-UV
iELSD Detection (pack)			no
pH/Conductimeter	no	no	yes
Injection			
4 port electrical valve	no	no	no
6 port electrical valve w/loop	no	no	yes
6 port + 10 port electrical valves w/loop	yes	yes	no
Injection mode: liquid - Dry-load	yes	yes	no
Column Selection valve			
14 port /6 position electrical valve	no	no	no
6 port electrical valve	pack-Multi	pack-Multi	no
System Optimization			
Tubings	1/8" x 1.0mm id	peek 1/16" x 0.75mm id	n.c.
Flow cell-optical length	1.3mm / 55µL	1.3mm/55µL	n.c.
Columns Holder			
Integrated	yes	yes	yes
Pre-column holder	yes	yes	no
Fraction Collector			
Regular Collector	3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm	3 racks Gen5 132 tubes 18x150mm
Unit control			
Touch screen 15"	yes	yes	yes
USB	8	8	8
RJ45	yes	yes	yes
Software			
InterSoft® X	yes	yes	yes
Safety			
Leak detection (pump, FC, ...)	yes	yes	yes
Solvent tray w/drainage system	yes	yes	yes
Collector w/drainage sytem	yes	yes	yes
Solvent level monitoring	yes	yes	yes
RFID	yes	yes	yes
Fume Encloser	yes	yes	yes
Size			
	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40cm D: 20.0" - 51cm H: 29.5" - 75cm	W: 15.75" - 40.0cm D: 20" - 51.0cm H: 29.5" - 75.0cm

Mass triggered fraction collection for NP & RP Flash Purification & prep-LC

Unique Interchim® design Dynamic split & dilution:

- High-speed work with all columns sizes without generating backpressure
- Integrated post-split dilution to adjust the concentrations used in the MS source (no concentration limit - no signal saturation)
- Normal & Reverse Phase
- Intelligent Pilot of the puriFlash® system
- Normalized Scale signals MS, UV, ELSD (6 acquisition signals)



	puriFlash® MS for small molecule, synthetic organic chemists. Upgraded specs for pos/neg switching, faster scanning & higher flow rate	puriFlash® MS-HMW for large molecules - peptide synthesis, polymer chemistry & natural products
Sources :	APCI - (ESI option)	APCI or ESI
Patented API:	orthogonal ion sampling from heated capillary allows for small single turbo pump.	orthogonal ion sampling from heated capillary allows for small single turbo pump.
Positive/Negative Ionization	Simultaneous Analysis	Simultaneous Analysis
Flow rate range ESI	10µL/min - 1mL/min	10µL/min - 1mL/min
Flow rate range APCI	10µL/min - 2mL/min	10µL/min - 2mL/min
mass range (m/z)	10 to 1200	10 to 2000
Scan rate (m/z-units per second)	10000	10000
Resolution (m/z-unites FWHM)	0.5 - 0.7	0.5 - 0.7
Sensitivity (SIM - S/N de 10 pg Reserpine, FIA 5µl injection à 100µl/min)	100:1	100:1
Accuracy (m/z)	0.1	0.1
Stability (m/z-units per 24 hour period: 18 - 24 °C)	0.1	0.1

Integrated (U)HPLC and streamlined software solutions



AVANT Advion's range of AVANT high performance and ultra-high performance liquid chromatography systems can be used standalone with UV and UV/Vis detector options, or with the expression CMS to provide seamlessly integrated LC/CMS under the full control of Advion's simple, intuitive Mass Express software suite. The Advion AVANT series offers:

- HPLC and UHPLC binary pumps
- Automated solvent selection of 4 solvents
- 6-way column switching
- Divert valve
- UV-Vis DAD
- Column oven
- Autosamplers with optional cooling
- Modular and stackable design
- High-pressure mixing with optional degassing

Advion Software Features



Advion offers a range of proprietary software that makes utilizing and interfacing with the expression CMS even easier.

Software packages include:

- **Mass Express:** Advion's standard software that provides answers in the fewest steps and shortest period of time possible in an easy-to-use interface.
- **Peak Express:** Unique, patented data analysis software that looks beyond chemical noise and automatically detects even the smallest peaks without knowing the m/z .
- **CheMS:** A simplified interface that allows the user to quickly select the workflow and type of compound with automatic optimization, so a user does not need to be an expert in mass spec to use the system.
- **LC Integration:** Advion offers a software solution to interface the CMS with other LC's to take advantage of existing instruments.



The expression CMS Family of Compact Mass Spectrometers



The family of **expression** CMS was developed with maximum versatility in mind allowing users to switch rapidly between various sample introduction techniques with little sample preparation. The affordability, small size, and ease of use make them ideal for a variety of applications including reaction monitoring, teaching, cannabis/hemp, food/ingredients, environmental and more.

Most laboratories require the ability to analyze a range of samples using more than one technique for more complete identification and characterization of samples. The **expression** CMS integrates with nearly every chemistry technique from the simplest, fastest direct probe analysis requiring no sample preparation to ultra-high performance compound separation with LC integration. The **expression** CMS offers the most versatile sample techniques on the market.



Advion provides an extensive range of innovative sample introduction systems that are fully integrated with the **expression** CMS to provide solutions for all the chemist's needs.

These techniques include:

- Plate Express® TLC Plate Reader
- Atmospheric Solids Analysis Probe (ASAP®)
- InertAtmospheric Solids Analysis Probe (iASAP)
- Touch Express™ Open Port Sampling Interface (OPI)
- Volatile APCI (vAPCI)
- AVANT™ Modular (U)HPLC
- Direct Injection/Flow Injection Analysis (FIA)

The CMS also directly interfaces with:

- Flow Chemistry
- Flash Chromatography
- Preparative Liquid Chromatography (Prep-LC)
- Supercritical Fluids Chromatography (SFC)



Reaction Monitoring

With the CMS, users can monitor progress and side reactions, and can quickly determine the optimal time to quench a reaction mixture.

Teaching Chemistry

The system is available with a teaching package with curriculum including video lectures and PowerPoint slides, offering professors the ability to easily provide students with industry-related knowledge and experience.

Cannabis & Hemp

Easy cannabinoid analysis, ideal for characterization, potency testing, screening for contaminants such as pesticides, and determination of optimal harvest time.



Food Safety and Ingredients Analysis

The CMS provides characterization, screening and purity determination.

Environmental Analysis

The perfect environmental testing companion, the CMS offers fast, direct screening and can be deployed in a field setting for immediate, on-site answers.



Clinical Diagnostics

The CMS with the AVANT (U)HPLC is optimized for clinical LC/MS assays such as Vitamin D2/D3 analysis or can be used standalone with a variety of prep-free screening techniques.

Proteins and Peptides

The expression[®] CMS extended range mass spectrometer is ideal for large molecule synthesis analysis including proteins, peptides, and oligonucleotides

The industry's widest range of sample introduction techniques



plate express

Thin-layer chromatography (TLC) is a routine, reliable method used in most chemistry laboratories, but traditional visualization techniques give no structural information on the TLC

spots. Mass Spectrometry is a powerful technique for identifying spots, but traditional, manual steps involving scraping spots from the plate, extraction in suitable solvents and finally reconstitution in solvent appropriate for injection into the mass spectrometer (MS), make obtaining spectra difficult and time consuming. The Plate Express is a device that provides a simple, automated means of obtaining mass spectra directly from TLC plates.

With the Advion Plate Express you can:

- Identify spots in <1 minute
- Avoid the risk of overloading the mass spectrometer
- TLC spots contain the ideal amount of sample for mass spectrometry
- Simplify the process of obtaining spectra
- Ideal for multi-user labs
- Software controlled - spectra obtained within a few mouse clicks
- No scraping TLC spots



ASAP Atmospheric Solids Analysis Probe

The direct atmospheric solids analysis probe, otherwise known as ASAP, permits chemists fast and reliable sample analysis of liquid and solid samples such as reaction mixtures, food samples, natural products and tablets.

The Advion ASAP probe offers:

- No sample preparation
- No chromatography
- Fast and affordable sample analysis
- Solvent-free APCI
- Green practices without the need to buy and dispose of solvent
- Ionizes a wider range of compounds

iASAP Inert ASAP Probe

The inert ASAP (iASAP) is a modification of the ASAP technique, allowing easy sampling of air-sensitive compounds, such as metal catalysts and organometallics, from reactions that are carried out in a glove box or Schlenk line to prevent oxidation.

Easy, prep-free sampling for a range of liquid and solid samples



OPSI Open Port Sampling Interface

The Touch Express Open Port Sampling Interface (OPSI), is designed for simple sampling of solids, liquids and sample preparation tips and fibers. Any soluble sample touching the port is analyzed by the mass spectrometer in mere seconds.

The OPSI source is a unique, prep-free sample technique that offers:

- Compound ID and impurity detection from almost any surface
- Direct assays from sample preparation tips and SPME fibers
- Easy screening applications for drug research, food safety, environmental, forensics
- Large molecule applications including proteins, peptides, oligonucleotides and polymers



vAPCI Volatile APCI Source

vAPCI combined with the expression CMS is a fast and easy method to quickly and confidently analyze compounds in air, breath, headspace and other gas samples without the need for additional sample preparation. vAPCI provides a sample inlet linked by a heated transfer line to the APCI ion source of the CMS, where the sample is ionized by chemical reaction by a corona discharge.

vAPCI enables chemists to:

- Analyze samples directly in the gas phase
- Solvent-free APCI allows a greater range of compounds to be ionized compared to traditional APCI ion sources.



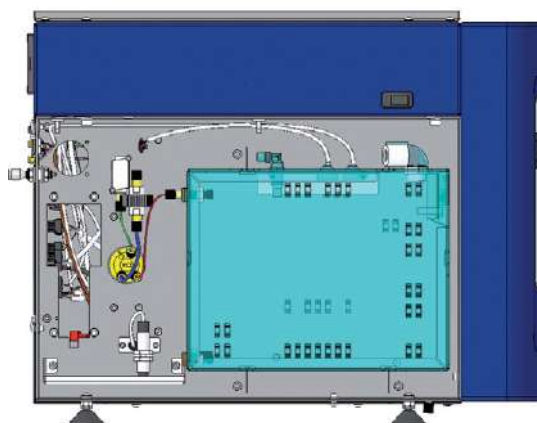
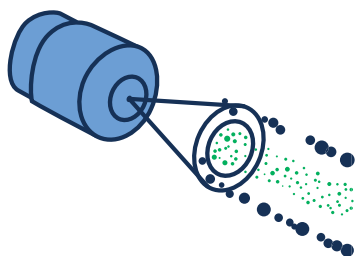
Direct Injection & FIA Flow Injection Analysis

Simple, direct injection valve offers users the ability to quickly and easily analyze reaction mixtures by direct injection/flow injection analysis. Both the APCI and ESI sources can receive samples for flow injection analysis.

Interchim® preparative integrated ELSD

Secure your purification by a Universal Detector

- Even non chromophore are now visible
- Specifically developed for purification mass response detector
- Full control of the split and the inlet flow
- True purification design nebulizer: no clogging
- Large dynamic range: mg up to hundred g
- Easy access /easy maintenance

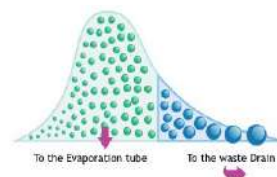


Optimized **Low Temperature** Technology
Quicker droplets drying at lower temperature
Preserves the integrity of thermo-sensitive compounds

Low Temperature Technology:

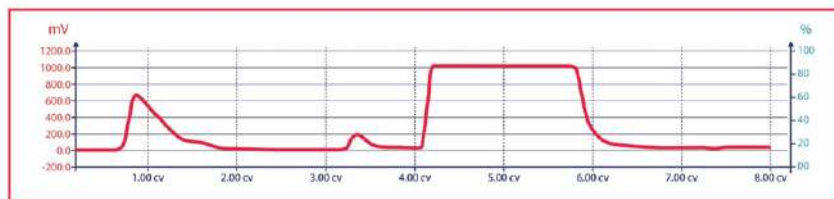
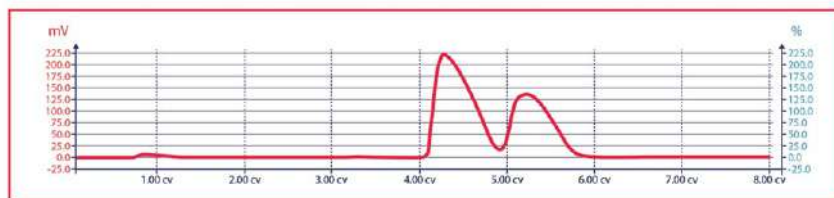
This technology provides greater sensitivity with both the nebulizer that enables droplet selection and an effective photomultiplier.

With this patented technology nebulizer, the droplets dry faster at low temperatures, providing appropriate signal intensities for semi-volatile compounds. This technology requires no additional peripherals, such as a nebulizer with heating system (spray chamber) or an evaporation tube (Peltier cooling) that can degrade the heat-sensitive compounds.

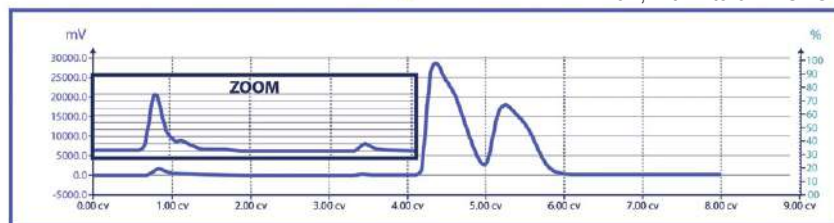


Dynamic Gain SAGA:

SAGA adapts the gain to avoid saturation while continuing to detect small quantities of products. ELSD becomes unsaturable without impact on sensitivity.



Now, with Interchim SAGA



- Detection: high sensitivity photodiode
- Source: LED (470nm)
- Ambient temperature to 100°C
- Dynamic Split: 40µL / min sample in DEDL
- Gas: 1-1.5L/min - 1bar

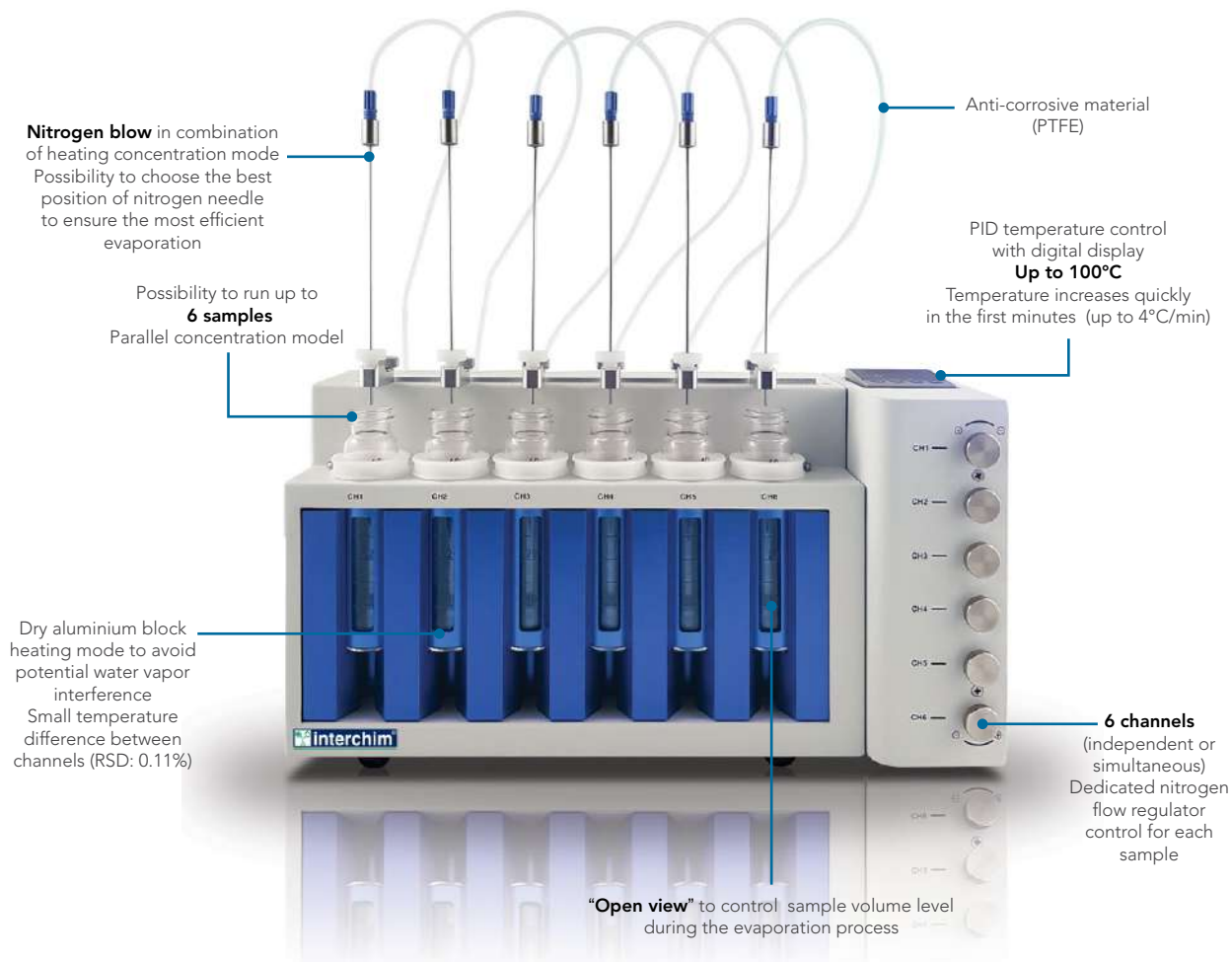
puriVap-6™ Interchim® Evaporator

Simple & Smart - 6 positions

puriVap-6™



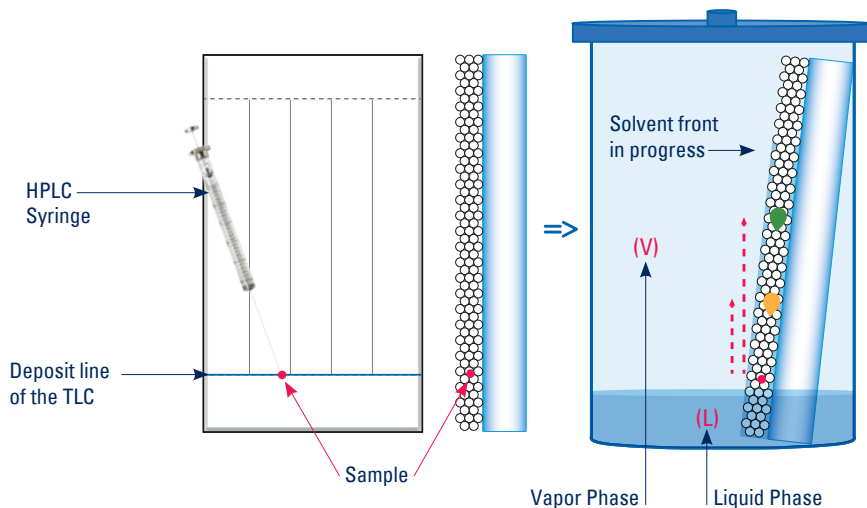
- 6 channels to run up to 6 samples (independent or simultaneous)
- Sample volumes from 2mL up to 60mL
- PID temperature control with digital display up to 100°C
- Temperature increases quickly in the first minutes (up to 4°C/min)
- Dedicated nitrogen flow regulator control for each sample
- Nitrogen blow in combination of heating concentration mode
- Possibility to choose the best position of nitrogen needle to ensure the most efficient evaporation
- Anti-corrosive material (PTFE)
- "Open view" to control sample volume level during the evaporation process
- Dry aluminium block heating mode to avoid potential water vapor interference
- Small difference temperature between channels (RSD: 0.11%)
- Low gas consumption (nitrogen gas supply : 1-2 bar max | flow rate: 7-8L/min)



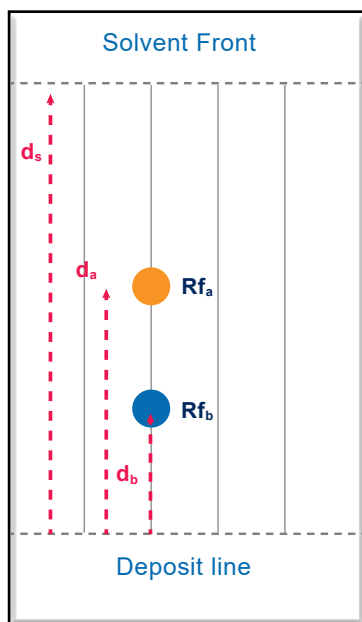
From theory to Modern Transfer TLC to Flash & Prep Chromatography

Basic principle:

The sample is dropped off, with a capillary, on the deposit line of the TLC plate which is then immersed in the tank containing the mobile phase. It then travels through the stationary phase by capillary, carrying each compound which moves at its own velocity behind the solvent front according to its affinity for the stationary and the mobile phases.



In TLC, the “retention factor” (R_f) is defined by the ratio of the distance traveled by the analyte (d_a) over the distance traveled by the solvent front (d_s).



$$Rf_a = d_a / d_s$$

$$Rf_b = d_b / d_s$$

In practice, it is necessary to consider the amount of mobile phase necessary to use to elute the solute out of the column. Taking into account their different geometries, this retention volume is expressed relative to the void volume of the column used.

It is a dimensionless number identified by the acronym CV (also called V_s)

$$Vs_a = CV_a = 1/Rf_a = 1 + k_a$$

$$Vs_b = CV_b = 1/Rf_b = 1 + k_b$$

$$\Rightarrow \Delta CV = CV_b - CV_a$$

There is a mathematical relation between CV and the retention factor k in liquid HPLC $\Rightarrow$

$$k = K_{tr} \times (1/Rf - 1) \text{ et avec } K_{tr} = \text{cste} = 1$$

$$\Rightarrow \Delta k = K_{tr} \times [(1/Rf_b - 1) - (1/Rf_a - 1)]$$

$$\Rightarrow CV = \Delta k$$

Revolutionize your TLC using our App: "TLC to Flash & Prep Chromatography"



Augmented reality for a greatly improved daily routine.

In our capacity as experts for purification, we aim to offer maximum working comfort as well as the highest efficiency in your laboratory.

Thanks to the app that we have developed, we can share your future vision by constantly providing new technology solutions. It takes a digital form here, virtual but already real on the screen of your mobile or tablet.

A unique technology that slides through your fingers with one single click.

Our idea is to support you and to save you time day by day. Therefore our App allows for:

- Our goal is to support you and to save you time day by day. Therefore, our app allows for:
- Automatic detection of your compounds and calculation of your R_f and $\Delta CV (= \Delta K)$ values
- Direct (and secure) information transfer to puriFlash® and the "Genius" software, which suggests the best method for a successful purification
- Data archiving, if desired.



Download the app now: bit.ly/interchimTLC

The application is extremely intuitively and user-friendly:



Take a picture of the TLC with your smartphone or download it from your library.



Your compounds will be detected automatically. Select the ones of interest with a tap.



The application calculates R_f and $\Delta CV (= \Delta K)$. It indicates if the R_f are placed in the comfort zone to carry out your purification.



From the smallest ΔCV obtained on your TLC plate, the application gives you the level of difficulty of the separation.



Indicate the solvents, their proportions and your comments in the dedicated areas.



Save your TLC plate information. Send them to the email address of your choice or directly to your puriFlash® by bluetooth or wifi: the "Genius" software will recommend the best method for a successful purification.

From theory to Modern Transfer HPLC to Prep

Method transfer from HPLC to Purification

Calculation of the preparative conditions =>

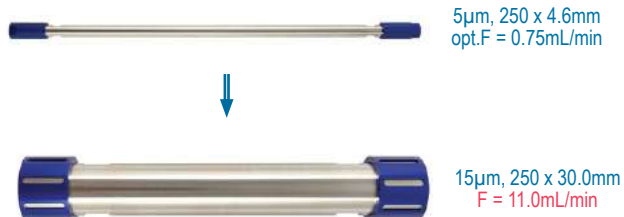
a) Flow rate (F)

It must be adjusted by keeping the linear velocity constant between the analytical and the transferred preparative method, taking into account the particle size and the geometry of the column.

$$F_{\text{prep}} = F_{\text{ana}} \times \left(\frac{id_{\text{prep}}^2}{id_{\text{ana}}^2} \right) \times \left(\frac{d_{\text{p ana}}}{d_{\text{p prep}}} \right)$$

Example:

$$F_{\text{prep}} = 0.75 \times \left(\frac{30.0^2}{4.6^2} \right) \times \left(\frac{5}{15} \right) = 11.0 \text{ mL/min}$$



b) Injected volume (V)

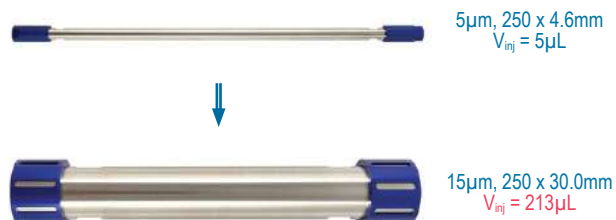
It must be adapted according to the volume of the phases to obtain the same chromatographic efficiencies.

The injected volumes are usually higher than those at the analytical scale to increase the loading capacity. Under overloading conditions, asymmetric peaks and a change in retention time are observed.

$$V_{\text{prep}} = V_{\text{ana}} \times \left(\frac{id_{\text{prep}}^2}{id_{\text{ana}}^2} \right) \times \left(\frac{L_{\text{prep}}}{L_{\text{ana}}} \right)$$

Example:

$$V_{\text{prep}} = 5 \times \left(\frac{30.0^2}{4.6^2} \right) \times \left(\frac{250}{250} \right) = 213 \mu\text{L}$$



c) Gradient conditions, isocratic step

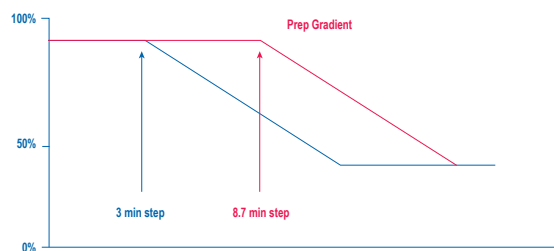
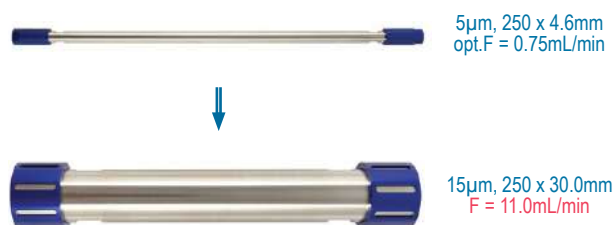
It is necessary to keep the ratio isocratic time / dead time of the column constant in analytic / preparative to keep a number of percolated column volumes equivalent.

$$T_{\text{prep}} = T_{\text{ana}} \times \left(\frac{id_{\text{prep}}^2}{id_{\text{ana}}^2} \right) \times \left(\frac{L_{\text{prep}}}{L_{\text{ana}}} \right) \times \left(\frac{F_{\text{ana}}}{F_{\text{prep}}} \right)$$

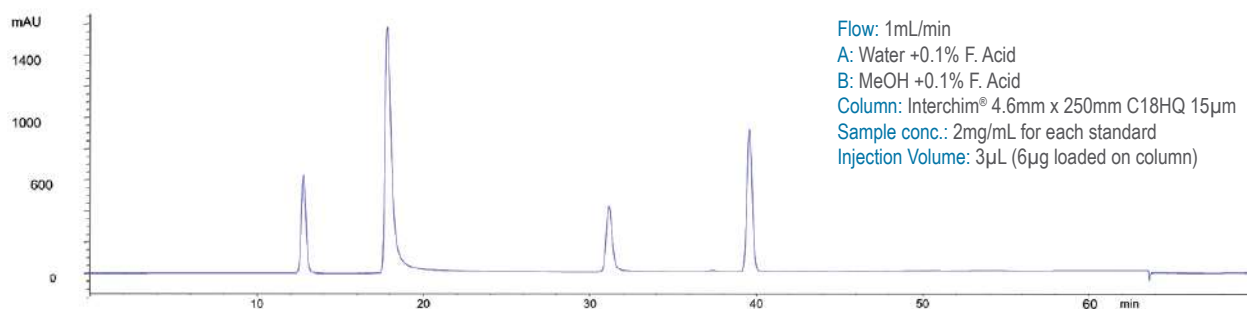
T = time of the isocratic step

Example:

$$T_{\text{prep}} = 3 \times \left(\frac{30.0^2}{4.6^2} \right) \times \left(\frac{250}{250} \right) \times \left(\frac{0.75}{11} \right) = 11.0 \text{ min}$$

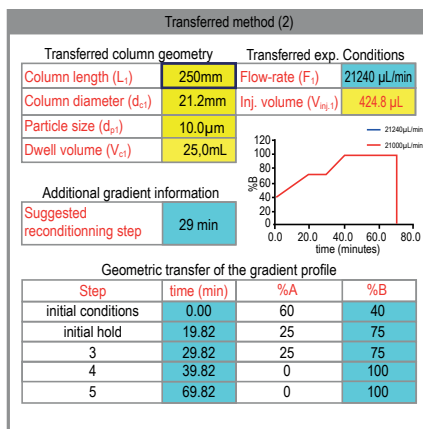
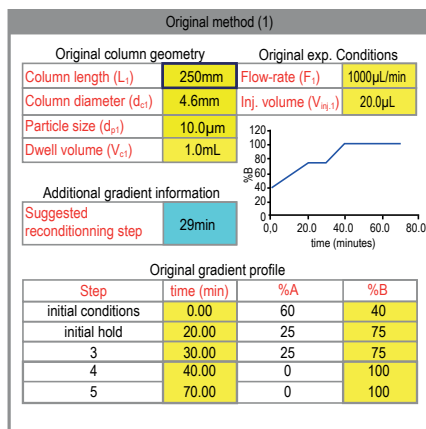
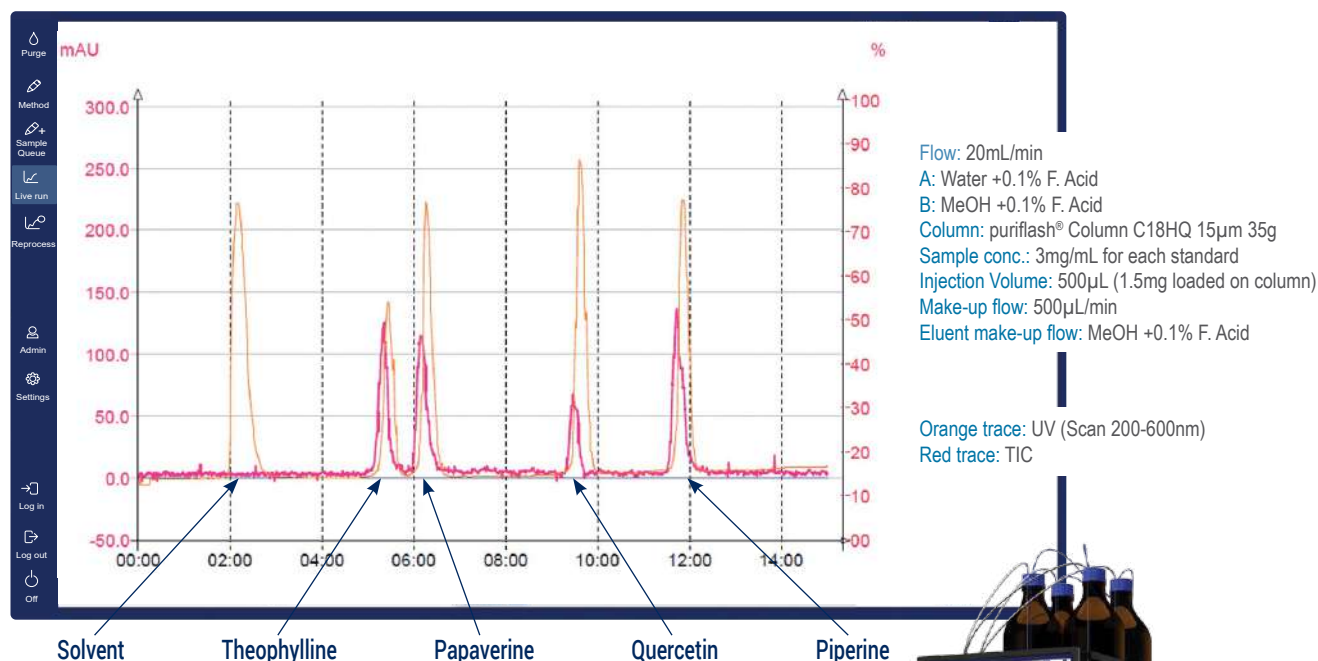


HPLC analysis using standard gradient method



Gradient transfer method*

UPFP-APCI/MS



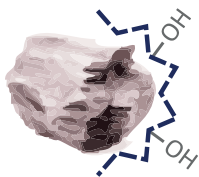
puriFlash® 5.125
 Complex Purifications with Confidence
 250mL/min@up to 125bar

Advion
 interchim®

* Davy Guillaume, Eur. J. Pharma. and Biopharma. 2008, 68, 430

The Essential Stationary Phases for Purification

Normal Phase



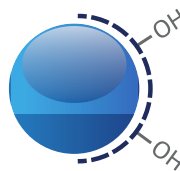
puriFlash® IR-SI

60Å - 450m²/g
20 & 40/63µm
pH stability: 1.5 to 6.5
Economical



puriFlash® SI-HP

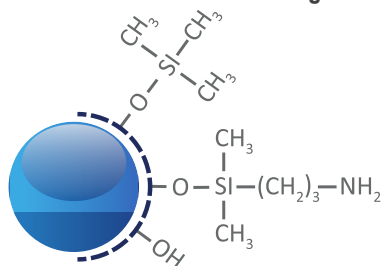
60Å - 500m²/g
5, 10, 15, 30 & 50µm
pH stability: 1.5 to 6.5
High efficiency



puriFlash® SI-HC

60Å - 680m²/g
15, 25 & 50µm
pH stability: 1.5 to 6.5
Greater loading capacity & productivity
Low back pressure

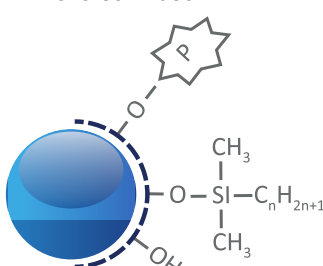
Normal Phase / Ion exchange



puriFlash® NH2

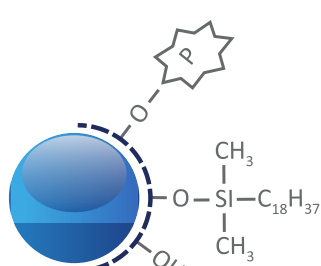
100Å - 300m²/g
5, 10, 15, 30 & 50 µm
Amino
%C: 4
End-capping: One-step
pH stability: 2 to 6.5
Can be both a weak anion exchanger for strong acids or a polar phase that can interact with the OH, NH, SH... functions.

Reverse Phase



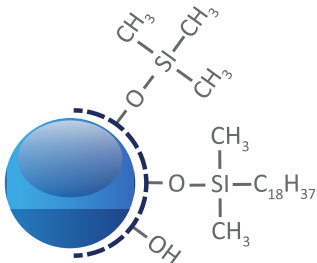
puriFlash® RP-AQ

60Å - 500m²/g
15 & 30µm
RP-alkyl
%C: 6
End-capping: Mixte
pH stability: 2.0 to 7.5
The bonding chemistry makes it possible to start the gradient at a 100% 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.



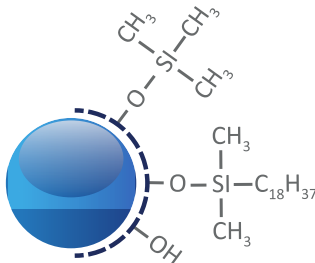
puriFlash® C18-AQ

100Å - 300m²/g
5, 10, 15 & 30µm
C18 Mono-functional
%C: 14
End-capping: Mixte
pH stability: 2.0 to 7.5
The bonding chemistry makes it possible to start the gradient at a 100% water. Suitable for the separation and purification of moderately polar and non-polar molecules.



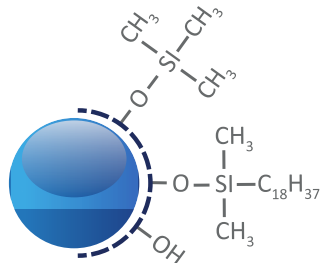
puriFlash® C18-HP

100Å - 300m²/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.



Uptisphere® Strategy™ C18-HQ

100Å - 425m²/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 425m²/g gives it a high loading capacity.



puriFlash® C18-XS

100Å - 300m²/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.

Complete list on www.flash-chromatography.com

Interchim® Flash columns

Interchim® offers more than 35 selections for the purification of small & bio-molecules.

Our Ultra Pure Spherical Silica combined with our chemistry establishes optimized sample recovery and makes easier transfer from analytical to purification.

Interchim® Genius allows an easy transfer from any TLC or analytical data from any columns to “ready-to-go” and safe Gradient Purification Method

RFID Traceability

Selectivity / Purity → Capacity → Productivity



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 ₀ (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® LC Preparative columns

Interchim® Preparative columns range from 10.0 to 50.8mm i.d and are for the purification of samples ranging from 0.5mg to 1 gram.

Column tubing & column packing

The tube polishing value (Ra) has a fundamental importance in preparative chromatography.

A primary reason for broad peaks and low efficiency is the utilization of poor quality tubing. Molecules in the center of the mobile phase stream can move more rapidly than molecules closer to the side due to friction against the tubing surface.

The lower the Ra value, the smoother the surface is, and the less ‘drag’ the tubing will place upon a given separation. Modulo-cart preparative columns pay particular attention to this potential negative phenomenon. All columns have extremely smooth internal surfaces (typically 8µ 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 can withstand packing pressures up to 550bar contributing strongly to a good bed stability and column life.



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, careful sample introduction control

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 to the column (without any sample distributor) will only interact with 0.01% of the surface column head. In addition to a dramatic loss in capacity there will also be a high potential for the column head to prematurely clog, rapidly reducing column life.

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 extending column life.

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

puriFlash® SIHP

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

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® 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

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

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

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

Uptisphere® Strategy™ C18-HQ

LC Preparative Columns				10µm				15µm			
	5µm	RFID	Qty		RFID	Qty			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

puriFlash® C18-XS

LC Preparative Columns				10µm				15µm			
	5µm	RFID	Qty		RFID	Qty			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				30µm			
	15µm	RFID	Qty		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	



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

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



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

Solid Sample

Dry injection



Allow to large sample amounts

High pressure 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 resolution, efficiency and purity of the products collected.

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

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

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

- Compatible with all purification systems

puriFlash® Dry-Load

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

High-Pressure Dry-Load

Nature	Type	Size	P/N	Qty
puriFlash® HP Dry-Load	Empty	50 x 21.2mm	OA0320	1u
		75 x 21.2mm	OA0330	1u
		100 x 21.2mm	7A1870	1u
		50 x 30mm	OA0340	1u
		75 x 30mm	OA0350	1u
		100 x 30mm	7A1880	1u
puriFlash® Dry-Load - Tightening tool				
Spanner wrench for 21.2mm ID			7A1590	1u
Spanner wrench for 30mm ID			7A1610	1u
Replacement frit				
Replacement frit for 21.2mm ID			OA2100	1u
Replacement frit for 30mm ID			OA2110	1u



Purification using PF-15C18HP-150/212

1. Analytical conditions

Solvents: A: Water

B: Acetonitrile (0.1% Formic acid)

HPLC Column: Waters Acquity BEH C18 250x4.6mm 1.7µm

Flow rate: 1mL/min

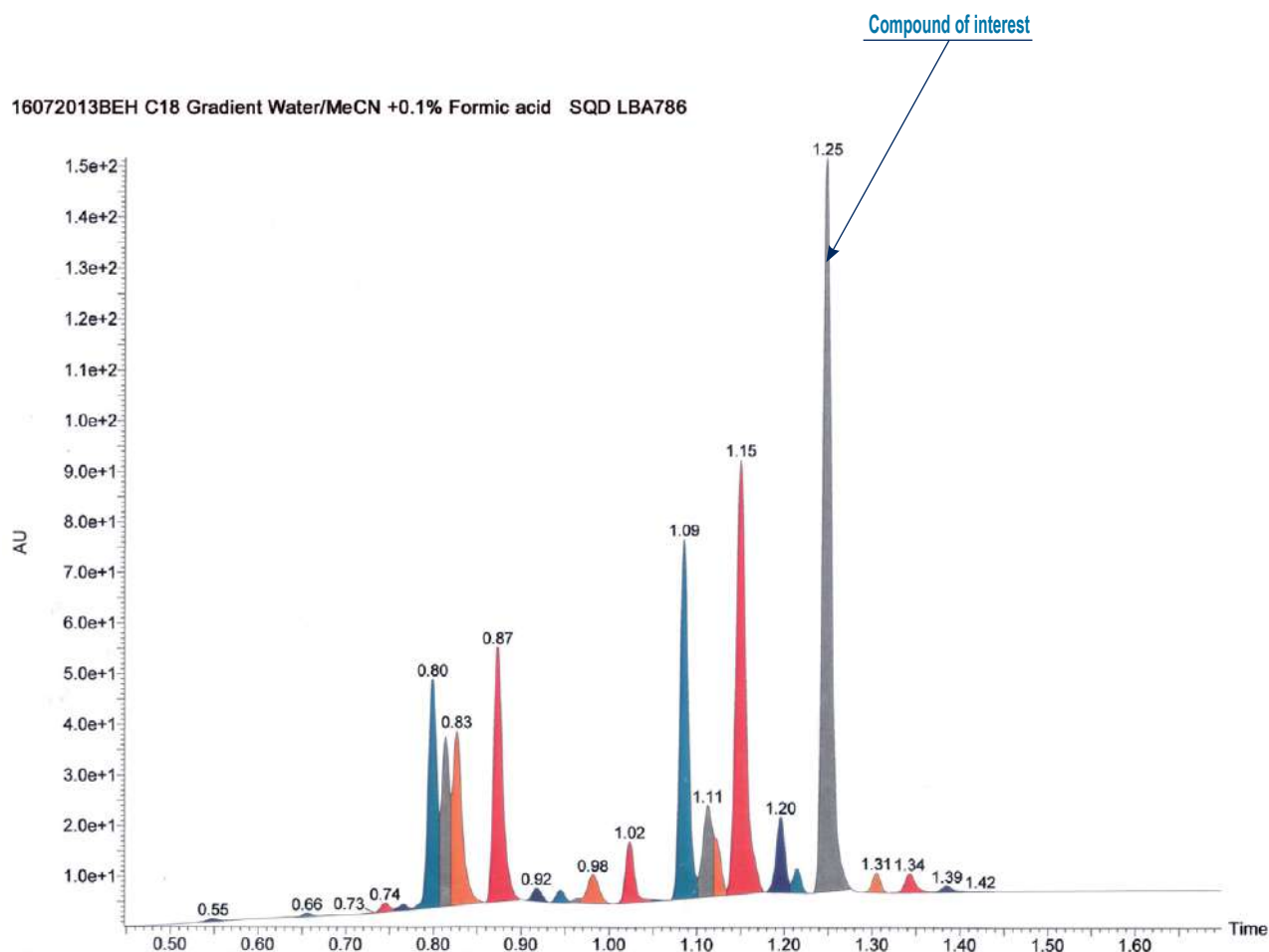
Injection mode: Liquid injection

Injection volume: 10µL

Concentration: 0.5mg/mL in Acetonitrile

Detection: UV 315nm

Elution conditions: 40% Water / Acetonitrile 60% (Isocratic mode)



2. Prep conditions

Device: puriFlash® 4250 (or now puriFlash® 5.250)

Solvents: A: Water

B: Acetonitrile (0.1% Formic acid)

Column: PF15C18HP-150/212

Flow rate: 20mL/min

Injection mode: Liquid injection

Crude sample: 100mg

Detection: UV 315nm (black), Scan 200-600nm (orange)

Pressure: 7bar

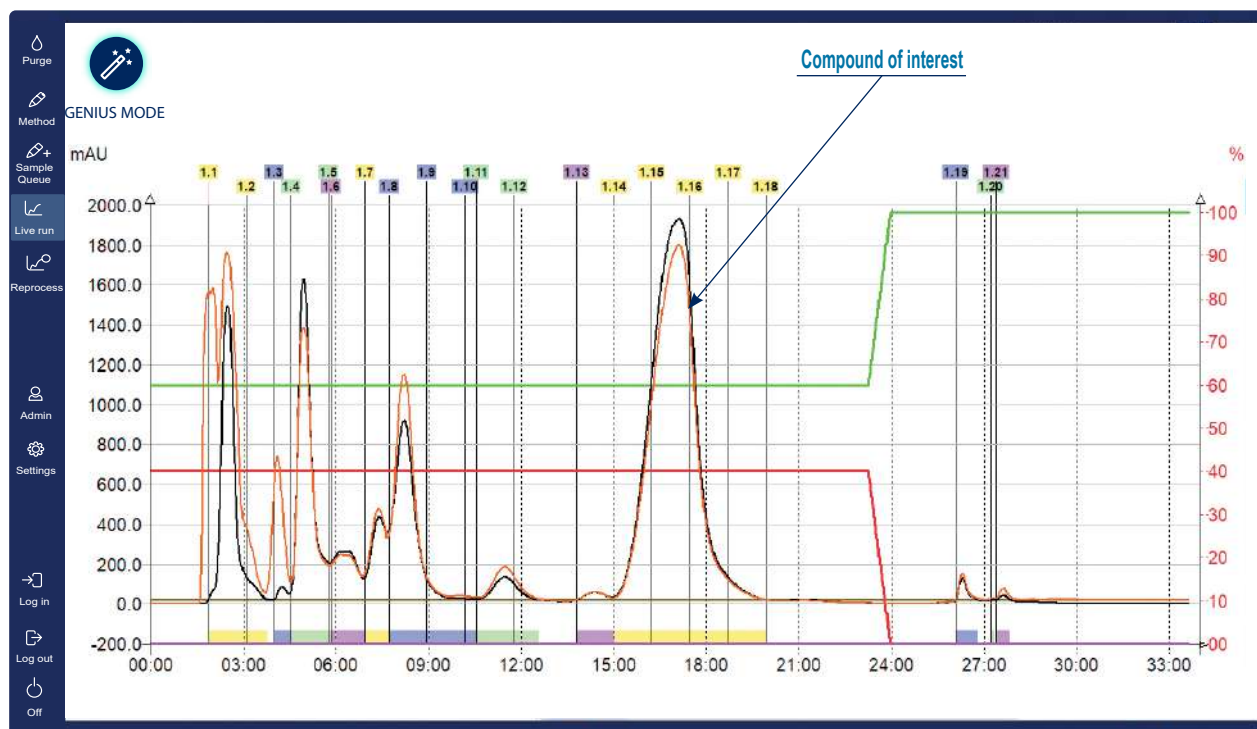
Elution conditions:

t (min)	A (%)	B (%)
00:00	40	60
23:00	40	60
24:00	0	100
29:00	0	100



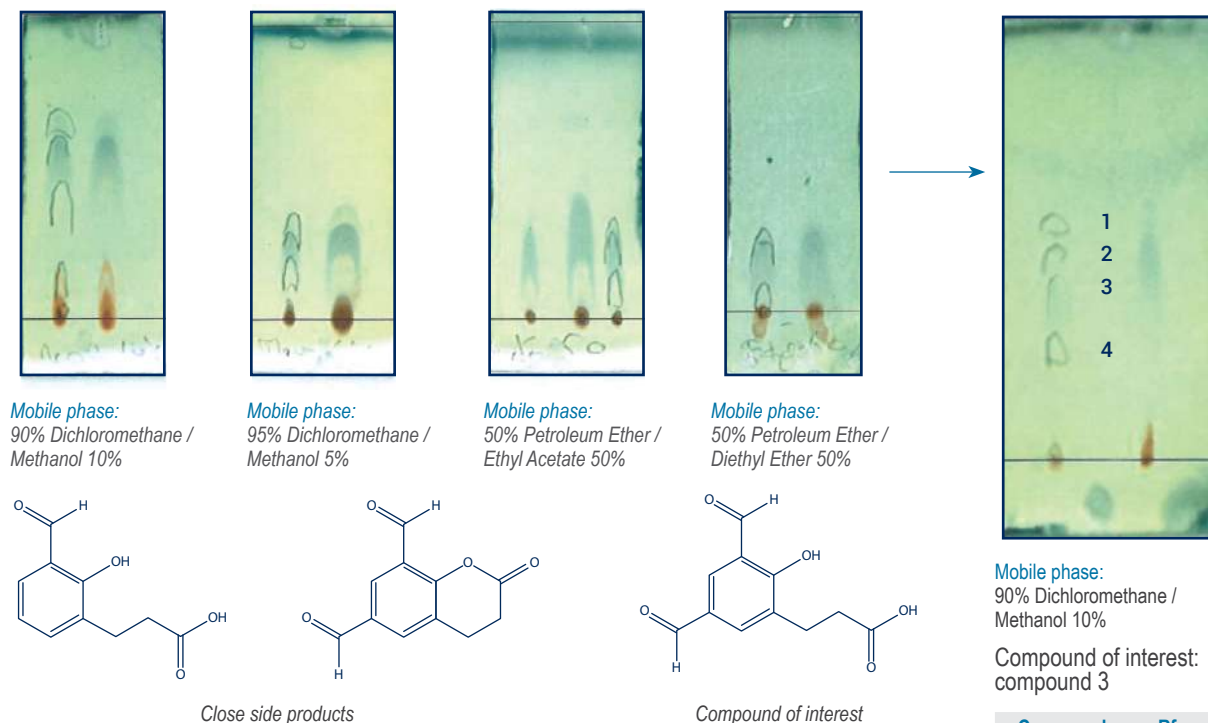
puriFlash® 5.250

*Small, but Limitless
250mL/min@up to 250bar*



Purification of mixture using PF-15SIHP-F0025

1. TLC method development



2. Choice of the column according to the ΔCV & crude sample mass

Crude sample: 47mg

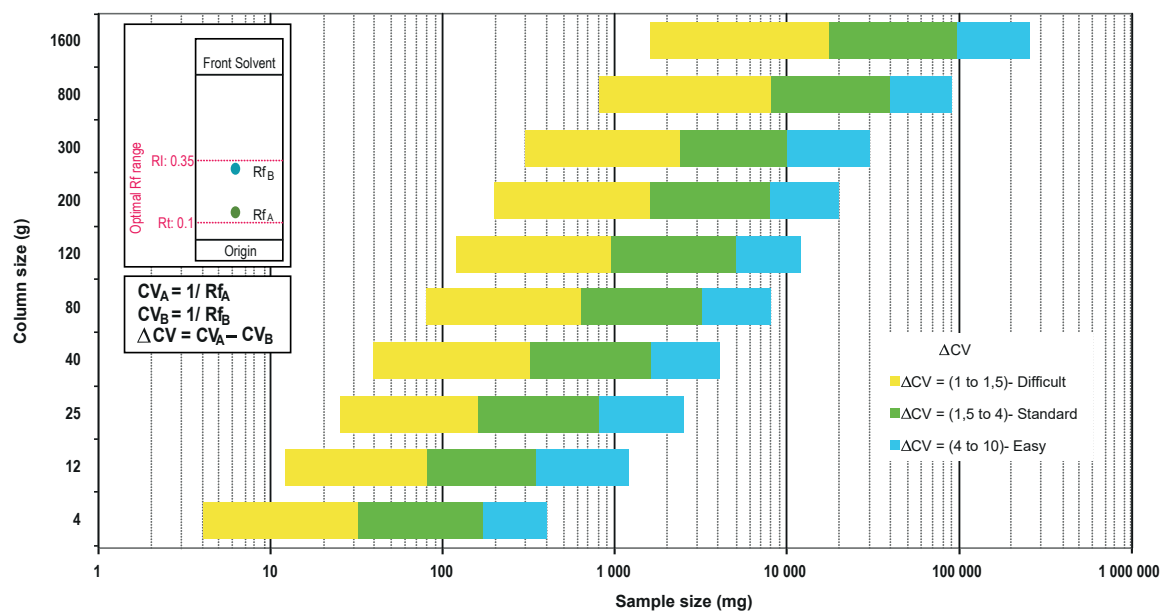
Column: PF-15SIHP-F0025

Loading capacity: 0.25%

Compound	Rf	CV
1	0.49	2.04
2	0.43	2.33
3	0.34	2.94
4	0.22	4.54

$\Delta CV_{3,2}=0.61$

Loading Selection Guide for puriFlash® IR-50SI (Edition 2008-2017)



Customer has chosen to use a PF-15SIHP-F0025 column to obtain a better separation (efficiency & purity) than with a IR-50SI-F0025 column.

3. Flash conditions

Device: puriFlash® XS 420Plus (or now puriFlash® XS 520Plus)

Solvents: A: Dichloromethane

B: Methanol

Column: PF-15SIHP-F0025

Flow rate: 15mL/min

Injection mode: Liquid injection

Crude sample: 47mg

Detection: UV 254nm (black), UV Scan 230-400nm (orange)

Mode: Automatic Gradient Optimization

Pressure: 1bar

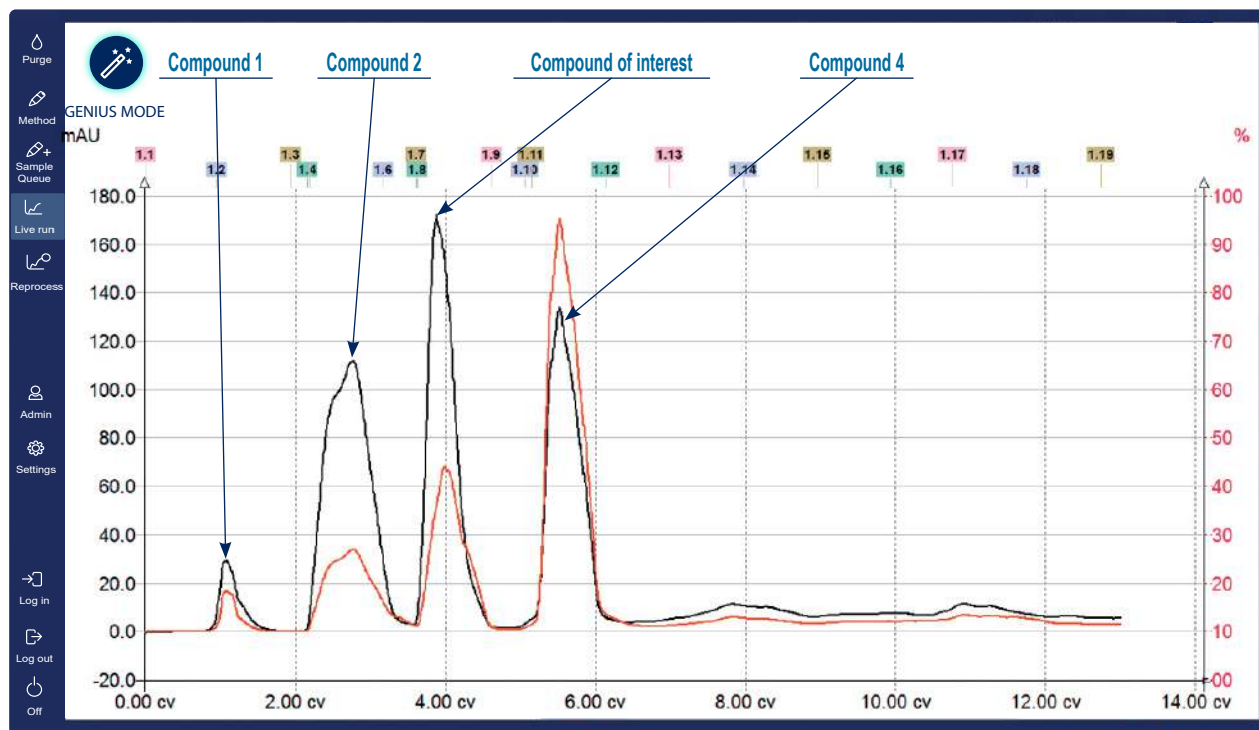
Elution conditions:

CV	A (%)	B (%)
0	98	2
1	98	2
11	90	10
13	90	10



puriFlash® XS 520Plus

Small, but Mighty
300mL/min@up to 20bar



Purification of Peptides / Advantage of puriFlash® monolith columns

1. Analytical conditions

Solvents: A: Water + 0.1%TFA

B: Acetonitrile + 0.1% TFA

HPLC Column: puriFlash® BIO 100 C18-N 15µm 250x4.6mm

Flow rate: 1mL/min

Injection mode: Liquid injection

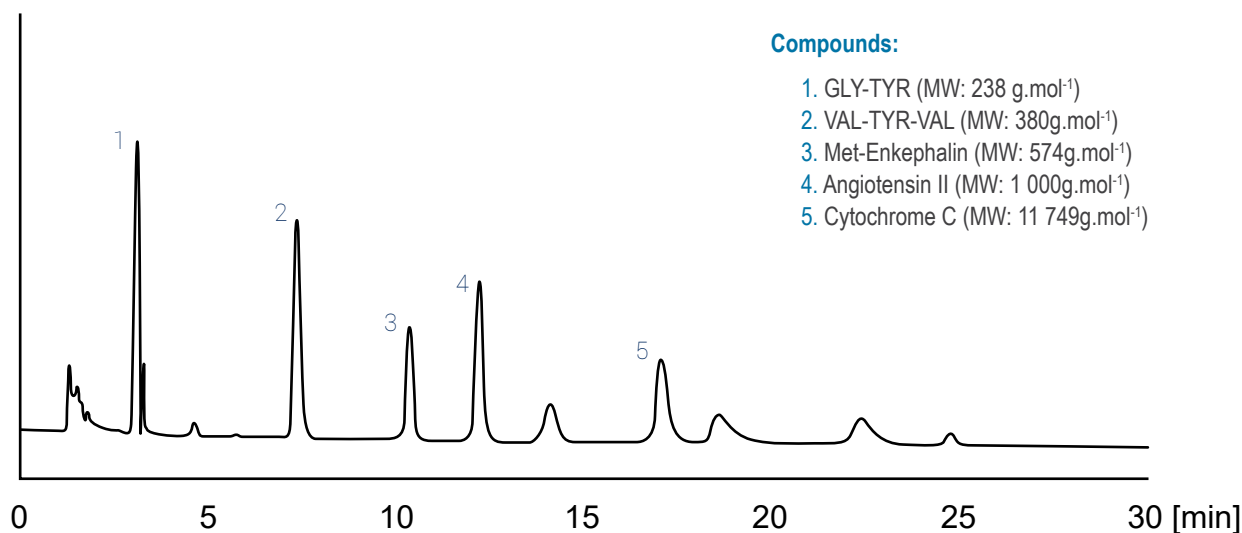
Injection volume: 10µL

Concentration: Mixture of Peptide standard (0.25mg/mL) and Protein standard (0.5mg/mL)

Detection: UV 215nm

Elution conditions:

t (min)	A (%)	B (%)
00:00	95	5
30:00	60	40



2. Flash conditions

Device: puriFlash® XS 420Plus

(or now puriFlash® XS 520Plus)

Solvents: A: Water + 1% TFA

B: Acetonitrile + 0.1%TFA

Column: puriFlash® Monolith C18 30µm F0025 (PM-30C18-F0025)

Flow rate: 15mL/min & 80mL/min

Injection mode: Liquid injection

Injection volume: 150µL

Crude sample: 9mg

Detection: UV 254nm (black), UV 215nm (orange)

Pressure: 2bar

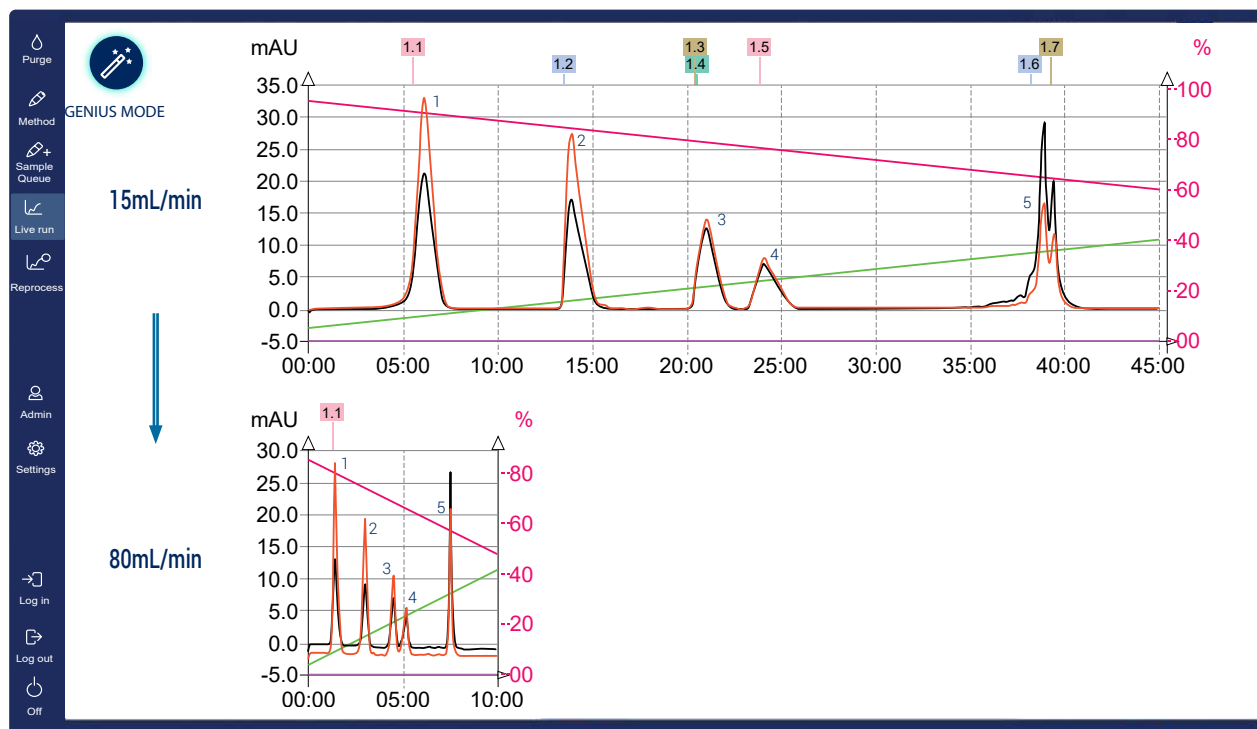
Elution conditions:

t (min)	A (%)	B (%)
00:00	95	5
45:00	60	40



puriFlash® XS 520Plus

Small, but Mighty
300mL/min@up to 20bar





ULTRA PERFORMANCE FLASH PURIFICATION

2018-20 edition



www.interchim.com/UPFP-Gen5.php



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