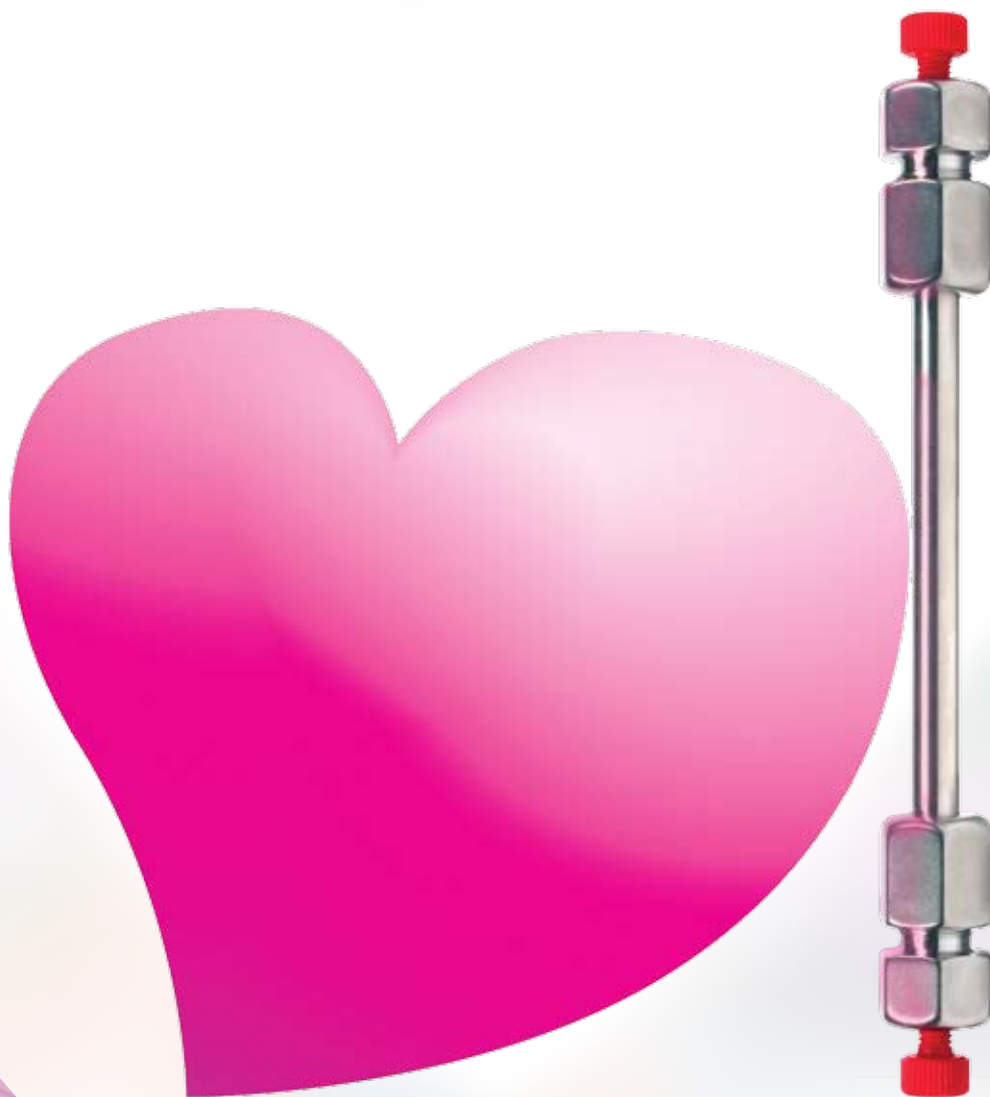
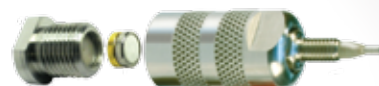




LOVE Your HPLC Column

Protect it with SecurityGuard™
Universal Guard Cartridge System



 **phenomenex**®
...breaking with tradition™



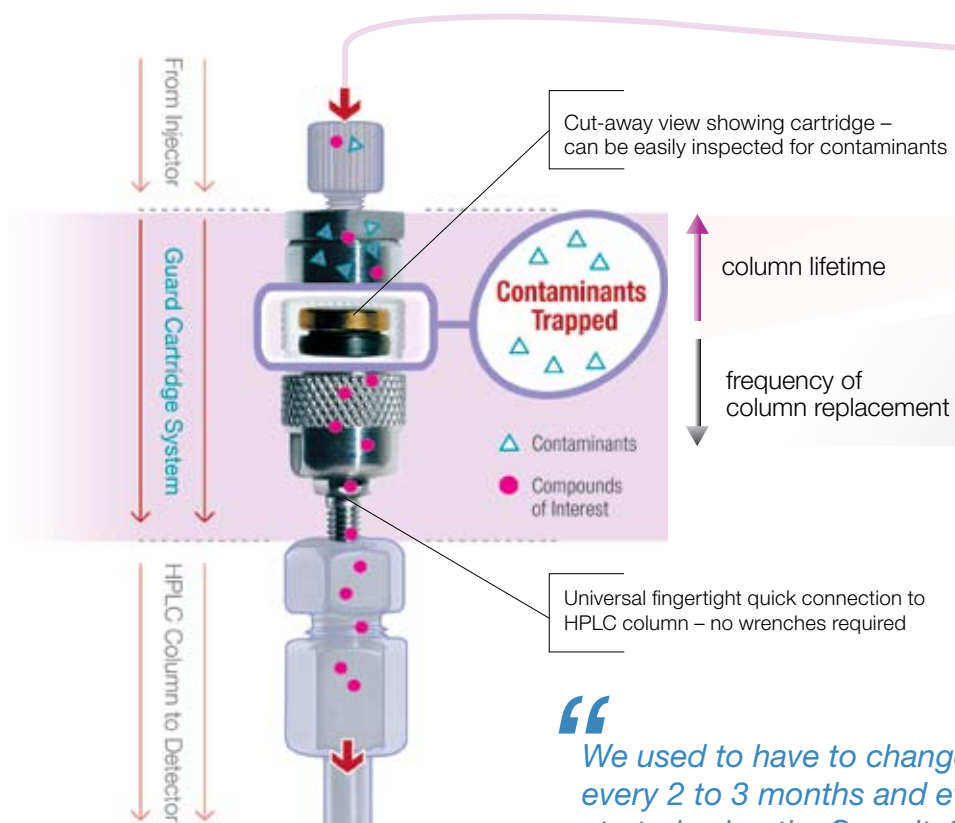
SecurityGuard™ protects your columns from contaminants.



- ♥ Extends HPLC column lifetime
- ♥ Won't alter chromatography
- ♥ Compatible with virtually all HPLC columns
- ♥ Easy to determine when to change cartridge
- ♥ Easy to use

How does it work?

The SecurityGuard analytical cartridge holder (patented) directly fingertightens into virtually any manufacturer's column with a female/inverted endfitting. Contaminants are retained by an inexpensive disposable cartridge instead of damaging your valuable HPLC column investment.



“ We used to have to change out our columns every 2 to 3 months and ever since we started using the SecurityGuard cartridges we can do at least 6 months before changing a column out. — T. Serviss ”

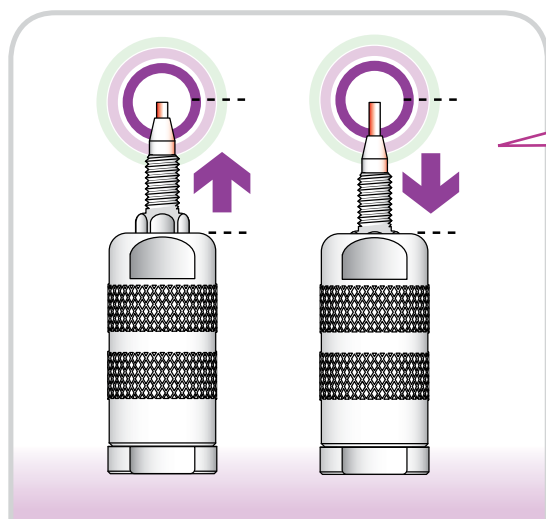


Will it work with my HPLC column?

SecurityGuard™ is a universal direct-connect holder.

The floating outlet from the analytical SecurityGuard holder fits virtually ANY manufacturer's column with a female/inverted endfitting, making it a truly universal guard system.

Universal fit patented design for analytical columns



The floating outlet automatically adjusts to the precise port depth of virtually any analytical HPLC column. This ensures a low-dead volume, leak-free connection, without the use of unions or adapters.

Fits virtually all your HPLC columns!

Gemini® NX

Jupiter®

Luna®

SphereClone™

BioSep™

HYPERSIL®

Spherisorb®

Inertsil®

Lux®

LiChrospher®

LiChrosorb®

Prodigy™

Gemini®

Vydac®

ZORBAX®

SunFire™

Ultrasphere®

Bondclone™

XBridge™

Capcell Pak®

Symmetry®

Rezex™

Nucleosil®

Synergi™

Partisil®

XTerra®

Develosil®

Partisphere®

Bio-Sil®

CHIRALCEL® OD-H®

PolymerX™

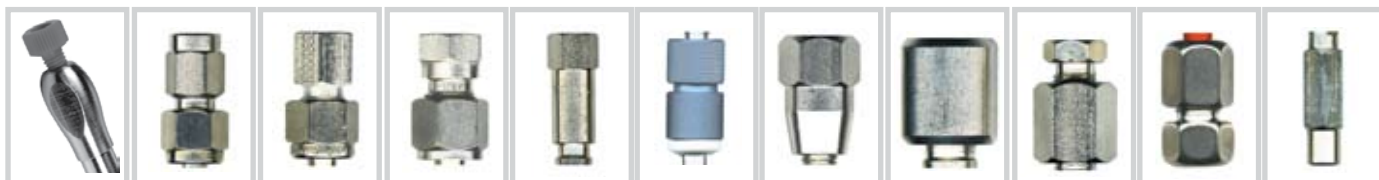
SynChropak®

Sugar-Pak™

Aminex®

Kromasil®

and many more...

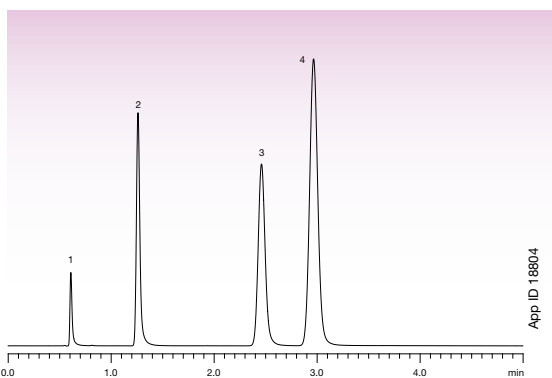


All trademarks belong to their respective owners.

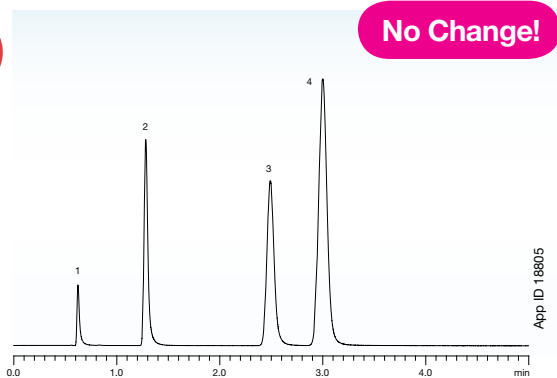
Will SecurityGuard™ alter my chromatography?

SecurityGuard will protect your valuable HPLC columns, without altering your chromatography results. The short 4 mm analytical cartridges have virtually no effect on efficiency, retention time, or backpressure.

Without SecurityGuard



With SecurityGuard

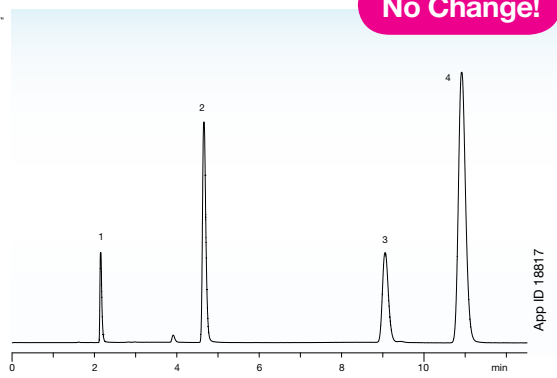
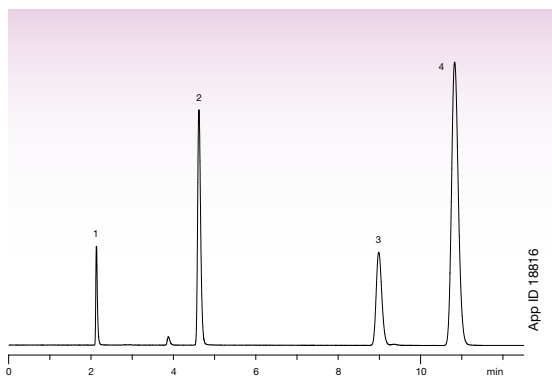


Conditions for both columns:

Column: Luna 3 µm C18(2)
Dimensions: 150 x 4.6 mm
Part No.: 00F-4251-E0
Mobile Phase: Acetonitrile / Water (65:35)

Flow Rate: 0.75 mL/min
Temperature: 25 °C
Detection: UV @ 254 nm
Injection Volume: 0.5 µL

Sample: 1. Uracil
 2. Acetophenone
 3. Toluene
 4. Naphthalene



Conditions for both columns:

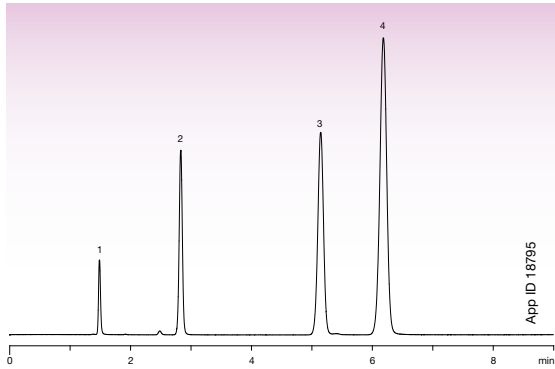
Column: Synergi 4 µm Max-RP
Dimensions: 250 x 4.6 mm
Part No.: 00G-4337-E0
Mobile Phase: Acetonitrile / Water (65:35)

Flow Rate: 1.0 mL/min
Temperature: 25 °C
Detection: UV @ 254 nm
Injection Volume: 1.0 µL

Sample: 1. Uracil
 2. Acetophenone
 3. Toluene
 4. Naphthalene

“ We didn't see any change in peaks. SecurityGuard has increased the life of the column. — B. Dietz ”

Without SecurityGuard™

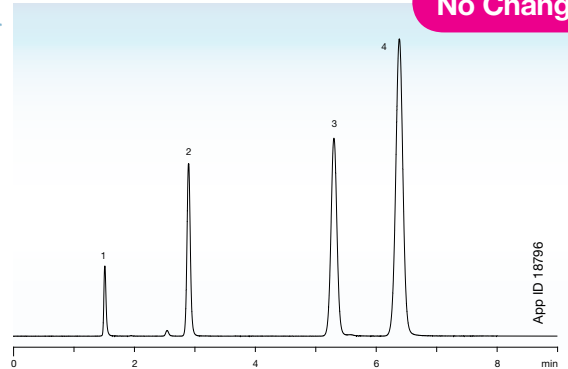


Conditions for both columns:

Column: Gemini 5 µm C18
Dimensions: 150 x 4.6 mm
Part No.: 00F-4435-E0
Mobile Phase: Acetonitrile / Water (65:35)

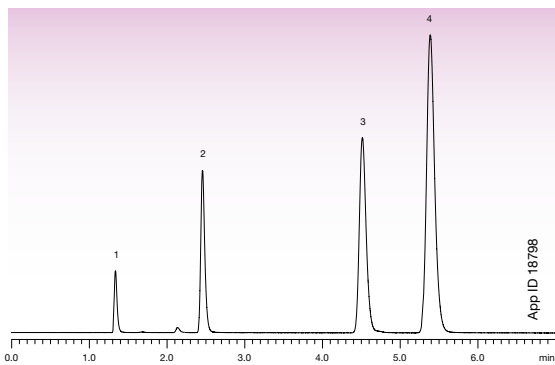
With SecurityGuard™

Gemini



Flow Rate: 1.0 mL/min
Temperature: 25 °C
Detection: UV @ 254 nm
Injection Volume: 0.5 µL

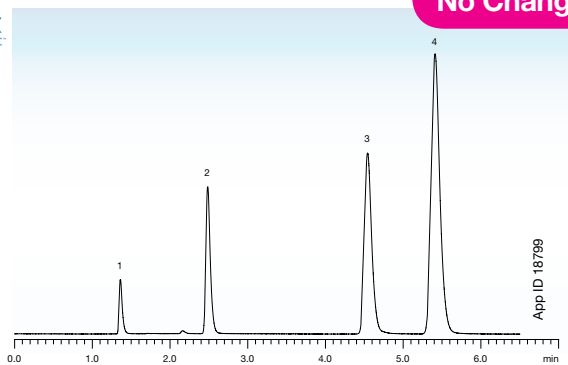
Sample: 1. Uracil
2. Acetophenone
3. Toluene
4. Naphthalene



Conditions for both columns:

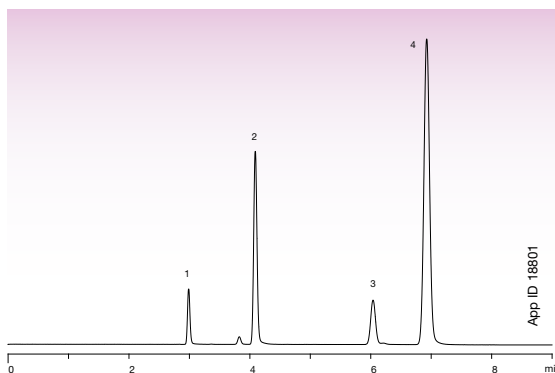
Column: Gemini NX 5 µm C18
Dimensions: 150 x 4.6 mm
Part No.: 00F-4454-E0
Mobile Phase: Acetonitrile / Water (65:35)

Gemini NX
pH-LC



Flow Rate: 1.0 mL/min
Temperature: 25 °C
Detection: UV @ 254 nm
Injection Volume: 0.5 µL

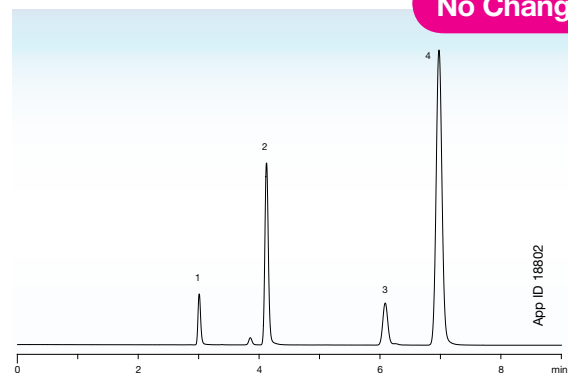
Sample: 1. Uracil
2. Acetophenone
3. Toluene
4. Naphthalene



Conditions for both columns:

Column: Jupiter 5 µm C18
Dimensions: 250 x 4.6 mm
Part No.: 00G-4053-E0
Mobile Phase: Acetonitrile / Water (65:35)

Jupiter



Flow Rate: 1.0 mL/min
Temperature: 25 °C
Detection: UV @ 254 nm
Injection Volume: 1.0 µL

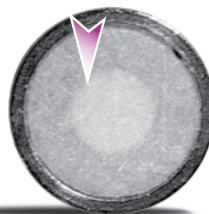
Sample: 1. Uracil
2. Acetophenone
3. Toluene
4. Naphthalene

When do I replace my cartridges?

The “see your dirt” feature lets you know exactly when it’s time to replace your cartridge.

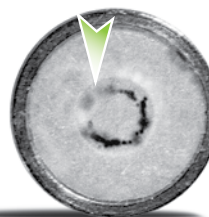
Visually inspect the surface of the cartridge’s packing material any time, without disturbing the packing bed. Now you can easily monitor visual contaminant build-up, and change your guard cartridge before it’s too late!

If your contaminants are colorless, replace the cartridge as often as needed to maintain chromatographic performance.



Clean

If it looks clean, the cartridge may be reinserted for further use.



Dirty

If either discoloration or particle build-up is observed, it’s time to replace the cartridge.



When replacing a cartridge it is visibly obvious that the extraneous material is captured by the cartridge and prevent contamination of the analytical column...

— F. Shakir



Why SecurityGuard is better.

<ul style="list-style-type: none"> Column protection Does not alter your chromatography One holder works with all columns (no coupler required) Ability to double stack cartridges for added protection Visually inspect for contaminants Inexpensive replacement 	<p>VS.</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Analytical SecurityGuard™ System</p> </div> <div style="text-align: center;"> <p>Traditional Analytical Guard Column ‡</p> </div> </div>
---	------------	---

‡ Traditional analytical guard column refers to: stainless steel hardware in 30 x 4.6 mm.

Read more testimonials at www.phenomenex.com/SGreviews

Easy Cartridge Selection



ANALYTICAL		SEMI-PREP	PREP	
IF YOUR HPLC COLUMN ID (mm) IS:				
2.0-3.0	3.2-8.0	9.0-16.0	18.0-29.0	30.0-49.0
USE CARTRIDGES (mm):				
4.0 x 2.0	4.0 x 3.0	10.0 x 10.0	15.0 x 21.2	15.0 x 30.0

guarantee

If the SecurityGuard System does not provide at least an equivalent performance as compared to a competing guard cartridge system, return the product with the comparative data within 45 days for a FULL REFUND.

Material	Description	pH Stability	4.0 x 2.0	4.0 x 3.0	10.0 x 10.0	15.0 x 21.2	15.0 x 30.0
Cartridges for General Purpose			/ 10 pk	/ 10 pk	/ 3 pk	/ ea	/ ea
C18	(ODS, Octadecyl)	1.5 - 10	AJO-4286	AJO-4287	AJO-7221	AJO-7839	AJO-8301
C12	(Dodecyl)	1.5 - 10	AJO-6073	AJO-6074	AJO-7275	AJO-7842	AJO-8304
C8	(MOS, Octyl)	1.5 - 10	AJO-4289	AJO-4290	AJO-7222	AJO-7840	AJO-8302
C5	(Pentyl)	1.5 - 10	AJO-4292	AJO-4293	AJO-7372	—	—
C1	(TMS)	2 - 9	AJO-4298	AJO-4299	AJO-7373	—	—
Silica	—	—	AJO-4347	AJO-4348	AJO-7223	AJO-7229	AJO-8312
HILIC	HILIC	1.5 - 8	AJO-8328	AJO-8329	—	—	—
NH₂	(Amino, Aminopropyl)	1.5 - 11	AJO-4301	AJO-4302	AJO-7364	AJO-8162	AJO-8309
CN	(Cyano, Cyanopropyl)	2 - 7.5	AJO-4304	AJO-4305	AJO-7313	AJO-8220	AJO-8311
Phenyl	(Phenylhexyl)	1.5 - 10	AJO-4350	AJO-4351	AJO-7314	AJO-7841	AJO-8303
PFP(2)	(Pentafluorophenylpropyl)	1.5 - 8	AJO-8326	AJO-8327	AJO-8376	AJO-8377	AJO-8378
SCX	(SA, Strong Cation Exchanger)	2.5 - 7.5	AJO-4307	AJO-4308	AJO-7369	AJO-8595	AJO-8596
SAX	(SB, Strong Anion Exchanger)	2.5 - 7.5	AJO-4310	AJO-4311	AJO-7370	—	—
RP-1	(Reversed Phase - Polymer)	0 - 14	AJO-5808	AJO-5809	AJO-7368	AJO-8358	—
Polar-RP	(Ether-linked Phenyl)	1.5 - 7	AJO-6075	AJO-6076	AJO-7276	AJO-7845	AJO-8307
Fusion-RP	(C18 Polar Embedded)	1.5 - 10	AJO-7556	AJO-7557	AJO-7558	AJO-7844	AJO-8306
AQ C18	(Polar Endcapped C18)	1.5 - 7.5	AJO-7510	AJO-7511	AJO-7512	AJO-7843	AJO-8305
Gemini® NX-C18	(C18 TWIN-NX™ Technology)	1 - 12	AJO-8367	AJO-8368	AJO-8369	AJO-8370	AJO-8371
Gemini C18	(C18 TWIN™ Technology)	1 - 12	AJO-7596	AJO-7597	AJO-7598	AJO-7846	AJO-8308
Gemini C6-Phenyl	(C6-Phenyl TWIN™ Technology)	1 - 12	AJO-7914	AJO-7915	—	—	—
Oligo-RP™	(C18 TWIN™ Technology)	1 - 12	AJO-8134	AJO-8135	AJO-8136	AJO-8210	AJO-8310
Oligo-WAX™	(WA, Weak Anion Exchanger)	1.5 - 11	—	AJO-8324	AJO-8325	AJO-8639	AJO-8420
Cartridges for Protein and Polypeptide Reversed Phase			/ 10 pk	/ 10 pk	/ 3 pk	/ ea	/ ea
<i>For use with silica columns for separation of proteins & peptides, such as Jupiter® (Phenomenex); Vydac® 218TP, 214TP (Alltech Associates, Inc.); SynChropak® 300 C18, C4 (Eprogen, Inc.); Nucleosil® 300 Å C18, C4; HYPERSIL® 300 Å, and other widepore or 300 Å brands.</i>							
Widepore C18	(ODS, Octadecyl)	1.5 - 10	AJO-4320	AJO-4321	AJO-7224	AJO-7230	AJO-8313
Widepore C5	(Pentyl)	1.5 - 10	AJO-4326	AJO-4327	AJO-7371	—	—
Widepore C4	(Butyl)	1.5 - 10	AJO-4329	AJO-4330	AJO-7225	AJO-7231	AJO-8314
Cartridges for Silica GFC			—	/ 10 pk	/ 3 pk	/ ea	—
<i>(Aqueous SEC) For use with silica GFC columns, such as BioSep™ (Phenomenex); ZORBAX® GF-Series (Agilent Technologies); Bio-Sil® (Bio-Rad).</i>							
GFC-2000	—	2 - 7.5	—	AJO-4487	AJO-7365	AJO-8588	—
GFC-3000	—	2 - 7.5	—	AJO-4488	AJO-7366	AJO-8589	—
GFC-4000	—	2 - 7.5	—	AJO-4489	AJO-7367	AJO-8590	—
Cartridges for Chiral			/ 10 pk	/ 10 pk	/ 3 pk	/ ea	/ ea
<i>For use with chiral columns, such as Lux® Cellulose-1, -2, -3, -4 & Amylose-2 (Phenomenex); CHIRALCEL® OD-H® & CHIRALCEL® OJ-H®, & CHIRALPAK® AD®-H (DAICEL Chemical Industries Ltd.)</i>							
Lux™ Cellulose-1	Cellulose tris(3,5-dimethylphenylcarbamate)	2 - 9	AJO-8402	AJO-8403	AJO-8404	AJO-8405	AJO-8406
Lux™ Cellulose-2	Cellulose tris(3-chloro-4-methylphenylcarbamate)	2 - 9	AJO-8398	AJO-8366	AJO-8399	AJO-8400	AJO-8401
Lux™ Cellulose-3	Cellulose tris(4-methylbenzoate)	2 - 9	AJO-8621	AJO-8622	AJO-8623	AJO-8624	AJO-8625
Lux™ Cellulose-4	Cellulose tris(4-chloro-3-methylphenylcarbamate)	2 - 9	AJO-8626	AJO-8627	AJO-8628	AJO-8629	AJO-8630
Lux™ Amylose-2	Amylose tris(5-chloro-2-methyl-phenylcarbamate)	2 - 9	AJO-8471	AJO-8470	AJO-8472	AJO-8473	AJO-8474
Cartridges for Carbohydrate/Organic Acid			—	/ 10 pk	—	—	—
<i>For organic acid and carbohydrate analysis, such as Rezex™ (Phenomenex); Aminex® (Bio-Rad); Interaction; Sugar-Pak™ (Waters).</i>							
Carbo-H⁺	—	1 - 8	—	AJO-4490	—	—	—
Carbo-Ag⁺	—	Neutral	—	AJO-4491	—	—	—
Carbo-Pb²⁺	—	Neutral	—	AJO-4492	—	—	—
Carbo-Ca²⁺	—	Neutral	—	AJO-4493	—	—	—

“ This product provides the insurance we need to use our analytical columns for intense production analysis. The SecurityGuard™ is easy to use and cartridge replacement is simple. — T. Sollima ”

Guard Cartridge Holders (reusable holders)	/kit KJO-4282	/holder AJO-7220	/kit AJO-8223	/kit AJO-8277

Australia

t: 02-9428-6444
 f: 02-9428-6445
 auinfo@phenomenex.com

Austria

t: 01-319-1301
 f: 01-319-1300
 anfrage@phenomenex.com

Belgium

t: +31 (0)30-2418700
 f: +31 (0)30-2383749
 beinfo@phenomenex.com

Canada

t: (800) 543-3681
 f: (310) 328-7768
 info@phenomenex.com

Denmark

t: 4824 8048
 f: +45 4810 6265
 nordicinfo@phenomenex.com

Finland

t: 09 4789 0063
 f: +45 4810 6265
 nordicinfo@phenomenex.com

France

t: 01 30 09 21 10
 f: 01 30 09 21 11
 franceinfo@phenomenex.com

Germany

t: 06021-58830-0
 f: 06021-58830-11
 anfrage@phenomenex.com

India

t: 040-3012 2400
 f: 040-3012 2411
 indiainfo@phenomenex.com

Ireland

t: 01 247 5405
 f: +44 1625-501796
 eireinfo@phenomenex.com

Italy

t: 051 6327511
 f: 051 6327555
 italiainfo@phenomenex.com

Luxembourg

t: +31 (0)30-2418700
 f: +31 (0)30-2383749
 nlinfo@phenomenex.com

Mexico

t: 001-800-844-5226
 f: 001-310-328-7768
 tecnicomx@phenomenex.com

The Netherlands

t: 030-2418700
 f: 030-2383749
 nlinfo@phenomenex.com

New Zealand

t: 09-4780951
 f: 09-4780952
 nzinfo@phenomenex.com

Norway

t: 810 02 005
 f: +45 4810 6265
 nordicinfo@phenomenex.com

Puerto Rico

t: (800) 541-HPLC
 f: (310) 328-7768
 info@phenomenex.com

Sweden


t: 08 611 6950
 f: +45 4810 6265
 nordicinfo@phenomenex.com

United Kingdom

t: 01625-501367
 f: 01625-501796
 ukinfo@phenomenex.com

United States

t: (310) 212-0555
 f: (310) 328-7768
 info@phenomenex.com

**All other countries:
Corporate Office USA** 

t: (310) 212-0555
 f: (310) 328-7768
 info@phenomenex.com



www.phenomenex.com

Phenomenex products are available worldwide. For the distributor in your country, contact Phenomenex USA, International Department at international@phenomenex.com

Terms & Conditions

Subject to Phenomenex Standard Terms & Conditions, which may be viewed at www.phenomenex.com/TermsAndConditions.

Trademarks

Gemini, Jupiter, Lux, and Luna are registered trademarks, and Axia, BioSep, Bondclone, pH-LC, Oligo-RP, Oligo-WAX, PolymerX, Prodigy, Rezex, SecurityGuard, SphereClone, Synergi, TWIN, and TWIN Technology are trademarks of Phenomenex. Alltima is a trademark of Alltech Associates, Inc. Bio-Sil and Aminex are registered trademarks of Bio-Rad Laboratories. Dionex is a registered trademark of Dionex Corporation. HYPERSIL is a registered trademark of Thermo Hypersil-Keystone. Nucleosil is a registered trademark of Macherey-Nagel. Sugar-Pak, SunFire, and XBridge are trademarks of Waters Corporation. Symmetry, Spherisorb, and XTerra are registered trademarks of Waters Corporation. SynChropak is a registered trademark of Eprogen, Inc. Vydac is a registered trademark of Alltech Associates, Inc. ZORBAX is a registered trademark of Agilent Technologies. CHIRALCEL, OD-H, CHIRALPAK, and AD are registered trademarks of DAICEL Chemical Industries, Ltd. Inertsil is a registered trademark of GL Sciences, Inc. Kromasil is a registered trademark of Eka Chemicals. Develosil is a registered trademark of Nomura Chemical Co. Ultrasphere is a registered trademark of Beckman Coulter, Inc. LiChrosorb and LiChrospher are registered trademarks of Merck KGaA, Darmstadt, Germany. Partisil and PartiSphere are registered trademarks of Whatman. Capcell Pak is a registered trademark of Shiseido Co., Ltd.

Disclaimer

Phenomenex, Inc. is in no way affiliated with the above companies. Comparative separations may not be representative of all applications.

SecurityGuard is patented by Phenomenex. U.S. Patent No. 6,162,362

CAUTION: this patent only applies to the analytical-sized guard cartridge holder and does not apply to SemiPrep, PREP, or ULTRA holders, or to any cartridges.

© 2012 Phenomenex Inc. All rights reserved.