

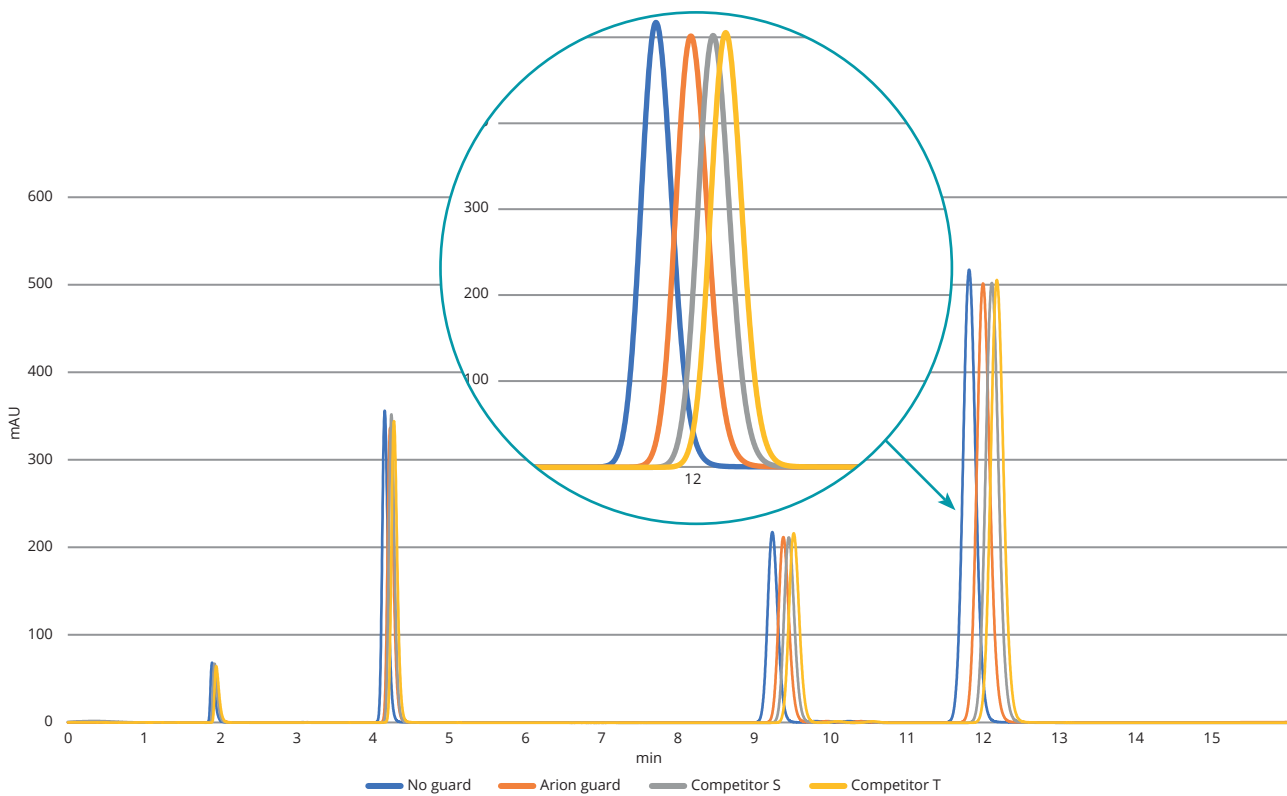
Guard column system

The ARION® Guard System (AGS) is a universal guard system, which can be connected to almost any column hardware on the market. It is easy to use and it offers the shortest retention time shift of analytes in comparison with other major manufacturers. The AGS consists of a Guard holder and Guard cartridge, which is offered with various silica materials according to the stationary phase in the HPLC column used.

- Universal – fits virtually any column on the market.
- The **lowest influence on retention times** compared with other guard systems.
- Small size for easier installation in the column oven.
- **Any orientation** of the cartridge.
- Pressure rating up to **900 bar**.
- Higher cartridge capacity.

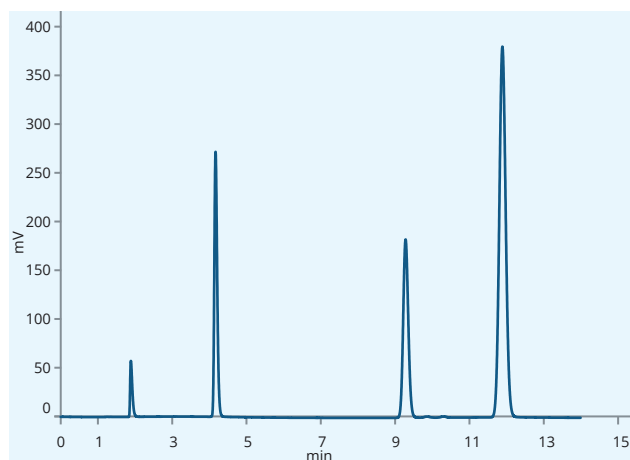


AGS system holder

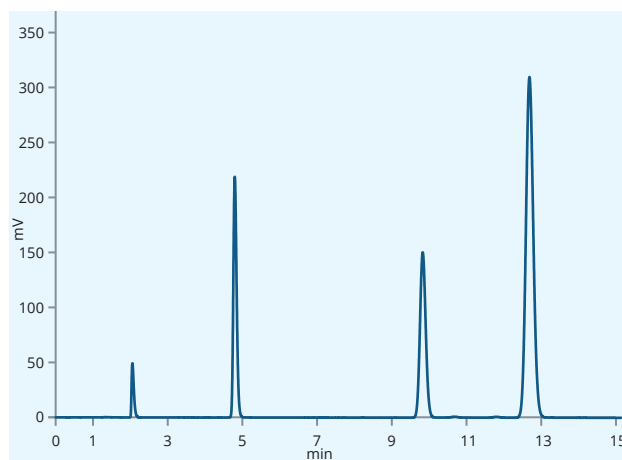


Comparison of guard systems from various manufacturers

Guard column system



ARION® Plus with ARION® Guard System



ARION® Polar with ARION® Guard System





Both chromatograms above show the separation of Uracil, Acetophenone, Toluene and Naphthalene with the ARION® Guard system in Acetonitrile/Water (65:35) at 254 nm. The ARION® Guard system does not affect column performance. It does not show any influence on peak symmetry or column resolution.

A higher sorbent bed (5 × 4 mm ID) offers a **raised capacity** without needing to couple two cartridges together. All this ensures lower running costs.



Guard System Selection Guide

Material	Pore size	pH Stability	Column ID	Column ID	100% aqueous mobile phase
			2.1-3.0 5.0 × 2.1 mm	3.0-4.6 5.0 × 4.0 mm	
					
			Package of 3 pcs	Package of 3 pcs	
RP 1.7 µm	100 Å	1 to 10	AGS-5731-RA2	-	×
RP 2.2 µm	100 Å	1 to 10	AGS-5731-RB2	-	✓
RP 3.0 µm	100 Å	1 to 10	AGS-5731-RC2	AGS-5731-RC4	✓
RP 5.0 µm	100 Å	1 to 10	AGS-5731-RD2	AGS-5731-RD4	✓
HILIC 2.2 µm	100 Å	1.5 to 7	AGS-5731-HB2	-	OM/W*
HILIC 3.0 µm	100 Å	1.5 to 7	AGS-5731-HC2	AGS-5731-HC4	OM/W*
HILIC 5.0 µm	100 Å	1.5 to 7	AGS-5731-HD2	AGS-5731-HD4	OM/W*
NP 2.2 µm	100 Å	n/a	AGS-5731-NB2	-	n/a
NP 3.0 µm	100 Å	n/a	AGS-5731-NC2	AGS-5731-NC4	n/a
NP 5.0 µm	100 Å	n/a	AGS-5731-ND2	AGS-5731-ND4	n/a
NH ₂ 2.2 µm	120 Å	2 to 6.5	AGS-5731-CB2	-	✓
NH ₂ 3.0 µm	120 Å	2 to 6.5	AGS-5731-CC2	AGS-5731-CC4	✓
NH ₂ 5.0 µm	120 Å	2 to 6.5	AGS-5731-CD2	AGS-5731-CD4	✓
BIO RP 3.0 µm	300 Å	1.5 to 7	AGS-5731-BC2	AGS-5731-BC4	×
BIO RP 5.0 µm	300 Å	1.5 to 7	AGS-5731-BD2	AGS-5731-BD4	×

* OM/W – Organic modifier (water-miscible)/water mobile phase recommended.

Ferrules for ARION® Guard System

Material	Pressure	10 pcs
PEEK	<400 bar*	AGS-5731-Y00
Stainless Steel, Type 316	<689 bar	AGS-5731-Z00

* Maximum pressure of PEEK ferrules depends on the tubing used. Max. pressure of 400 bar is for 1/16" OD tubing with ID 0.05 to 0.18 mm. ARION® Guard System includes one Stainless Steel ferrule in standard package.



AGS holder with PEEK ferrule
p/n AGS-5731-00P



AGS holder with Stainless Steel ferrule
p/n AGS-5731-000

Guard system for preparative columns

Preparative guard column system (PGS) is intended to use with 10 mm, 21.2 mm and 30 mm ID preparative HPLC columns.

Preparative Guard System Holders

ID	Description	Part number
10 mm	ARION® Preparative 10 mm Guard System, Holder only for ID 10 mm	PGS-5856-001
21.2 mm	ARION® Preparative 10 mm Guard System, Holder only for ID 21.2 mm	PGS-5856-000
30 mm	ARION® Preparative 10 mm Guard System, Holder only for ID 30 mm	PGS-5856-00Q

Preparative Guard System cartridges

5 µm AGS all dimensions in mm			
Phase	10 × 10	10 × 21.2	10 × 30
C18	PGS-5856-UD8	PGS-5856-UD9	PGS-5856-UDC
C18 Polar	On request	PGS-5856-WD9	PGS-5856-WDC
C8	On request	PGS-5856-TD9	On request
Pheny-butyl	On request	On request	On request
Biphenyl	On request	PGS-5868-UD9	On request
Si	On request	PGS-5856-VD9	PGS-5856-VDC

Preparative Guard System cartridges

10 µm AGS all dimensions in mm			
Phase	10 × 10	10 × 21.2	10 × 30
C18	PGS-5856-UF8	PGS-5856-UF9	PGS-5856-UFC
C18 Polar	PGS-5856-WF8	PGS-5856-WF9	PGS-5856-WFC
C8	On request	On request	On request
Pheny-butyl	PGS-5856-PF8	PGS-5856-PF9	On request
Biphenyl	On request	On request	On request
Si	On request	On request	PGS-5856-VFC

Preparative Guard System cartridges

15 µm AGS all dimensions in mm			
Phase	10 × 10	10 × 21.2	10 × 30
C18	PGS-5856-UG8	PGS-5856-UG9	On request
C18 Polar	PGS-5856-WG8	PGS-5856-WG9	On request
C8	On request	On request	On request
Pheny-butyl	PGS-5856-PG8	PGS-5856-PG9	On request
Biphenyl	On request	On request	On request
Si	On request	On request	On request



PGS holder
p/n PGS-5856-000



Preparative guard system cartridge