

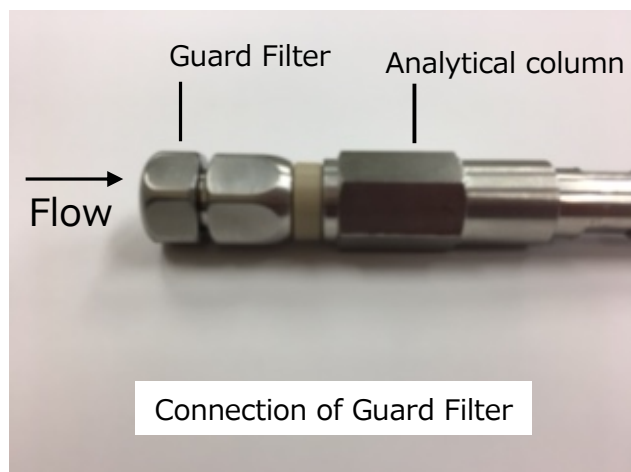
## Develosil Guard Filter

1.0mm~6.0mm i.d. column

### Necessity of guard filter

*Develosil guard filter efficiently collects unwanted materials and fine particles contained in the sample with a filter. Used to protect the HPLC column.*

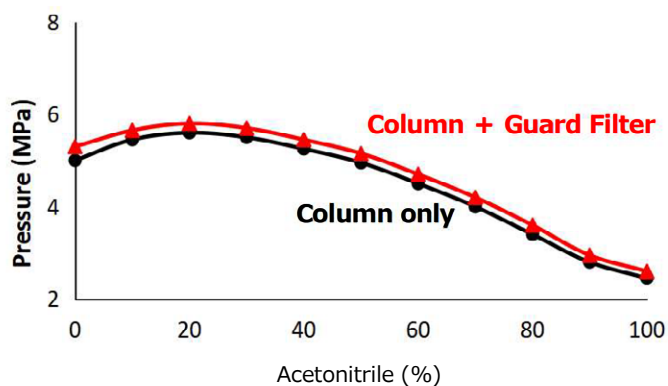
*Now that sample preparation tools are available, the use of guard filters is inexpensive and maintains high reproducibility without compromising analysis results compared to packing type guard columns. In particular, as the UHPLC system becomes more widespread, it is necessary to approach "zero dead volume" as much as possible. Develosil Guard Filter is directly connected to the column, so it can be operated at lower risk than coupler connection.*



*The column-connected type Develosil Guard Filter can be attached to the column using a simple tool. And filter replacement is easy.*

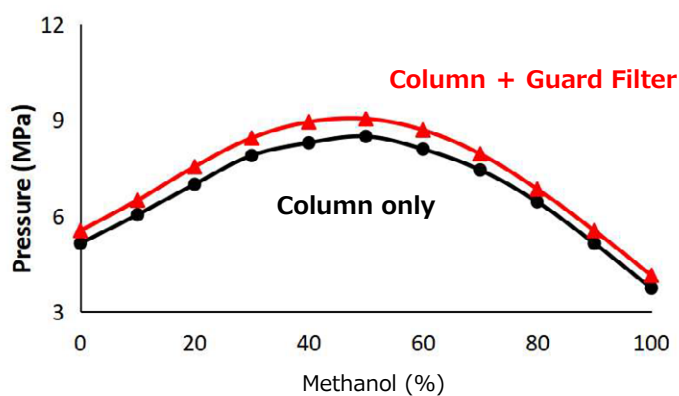
*This single tool is suitable for columns with an inner diameter of 1.0 mm to 6.0 mm and is a tool developed for UHPLC, so it has sufficient pressure resistance (100 MPa).*

- Change in pressure with composition ratio change (acetonitrile / water)



Column: Develosil HSR AQ C18, 5 $\mu$ m(4.6x150mm)  
 Mobile phase: Acetonitrile/Water  
 Flow rate: 1.0mL/min Temperature: 40°C

- Change in pressure with composition ratio change (Methanol / water)

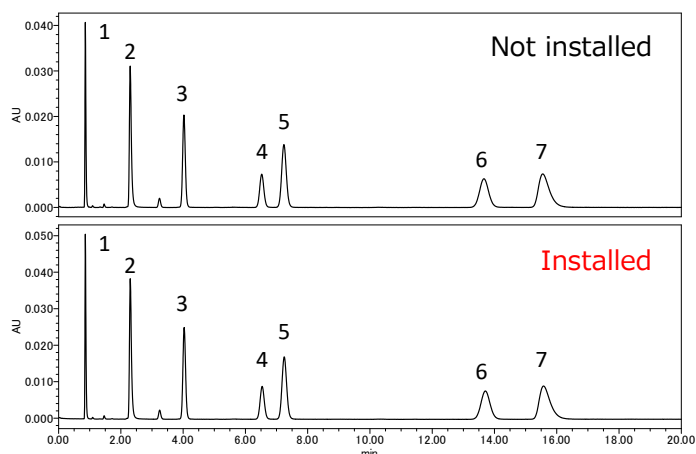


Column: Develosil HSR AQ C18, 5 $\mu$ m(4.6x150mm)  
 Mobile phase: Methanol/Water  
 Flow rate: 1.0mL/min Temperature: 40°C

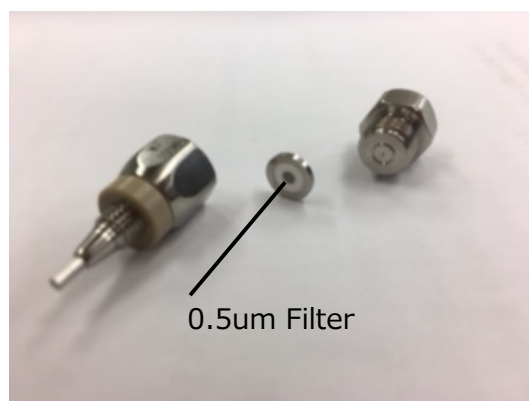
*Most assays are built with acetonitrile or methanol will be.*

*With the Develosil guard filter, the pressure rise is negligible and you are not exposed to the threat of system pressure or column pressure.*

## ■ Performance comparison with guard filter



Column: Develosil HSR AQ C18, 3 $\mu$ m(4.6x75mm)  
 Mobile phase: Methanol/Phosphate buffer, pH7=65/35  
 Flow rate: 1.0mL/min Temperature: 40°C



### Not installed

	Retention (min)	NTP	Symmetry factor	Rs
Peak 1	0.859	3984	1.24	
Peak 2	2.300	6624	1.27	17.25
Peak 3	4.025	10347	1.09	12.75
Peak 4	6.525	10838	1.06	12.26
Peak 5	7.237	10858	1.08	2.70
Peak 6	13.663	10162	1.05	15.72
Peak 7	15.554	9474	1.28	3.21

### Installed

	Retention (min)	NTP	Symmetry factor	Rs
Peak 1	0.86	4019	1.23	
Peak 2	2.302	6672	1.26	17.32
Peak 3	4.033	10339	1.09	12.79
Peak 4	6.538	10818	1.06	12.25
Peak 5	7.247	10830	1.08	2.69
Peak 6	13.708	10121	1.06	15.73
Peak 7	15.575	9458	1.27	3.22

*There is almost no difference in performance with or without Develosil Guard Filter. Contributes to the long life of the column while maintaining the original performance of the column.*

Product name	Code
Develosil Guard filter (Built-in 1 filter)	GF28126
Exchange filter (3 pieces)	GF28155



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