

How to keep the Column performance

- **Necessity of cleaning the water for eluent**
- **Using guard column**
- **How to wash and store columns**

Daily maintenance of the column

Eluent with acids, buffer, ion-pair

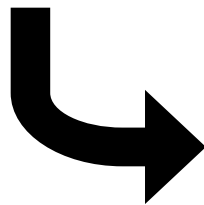
At first you must wash the column using same organic solvent and ratio(%) that was used as an eluent without any additives.

Eluent without additives

Example:

Eluent = 0.1% H₃PO₄ in 35% Methanol

Wash solvent = 35% Methanol



Wash column using 100% organic.

= same as an eluent

**Store column with eluent .
(without additives)**

**When using a gradient elution,
use 30 ~ 50% of organic to store column.**

How to wash column

When is the best timing to wash the column?

When you observe fluctuation in retention time, increase in pressure, deterioration of separation, and poor peak shape.

	To remove polar compounds	To remove non-polar compounds
In case of using reverse phase mode including HILIC mode	1) Water 2) Methanol 3) THF * 2 4) Methanol 5) Water 6) Eluent	1) Isopropanol 2) THF * 2 3) Dichloromethane 4) Hexane 5) Isopropanol 6) Eluent
In case of using normal phase mode	1) Isopropanol 2) Methanol 3) Water * 1 4) Isopropanol 5) Eluent	1) Isopropanol 2) Methanol 3) Dichloromethane 4) Hexane 5) Isopropanol 6) Eluent

* 1 Skip this process when you use none chemical bonded silica-gel.

* 2 Do not introduce it to fittings that are made out of PEEK!

How to Store column

The solvent type for storing the column will depend on how long the column will not be used.

Column	1 ~ 10 days	Few weeks ~
ODS (C18),C8,C4,Ph	Eluent without additives	100% Methanol
CN,NH ₂ ,Diol,SIL	Eluent without additives	100% Hexane
AX,CX	Eluent without additives	100% Methanol

* When the column was not used for a long period of time, please wash the column before use.