Precolumn types and replacement guidelines, etc.

List of precolumns for each analysis

Separation column Type Size	Sample type	Mobile phase pH	Darget substance	→	Recommended precolumn		
					Types of fillers	Size	Position
CAX ϕ2.0 x 200 mm	microdialysis	6	NE, DA, 5-HT		CA-ODS	ϕ 4 x 5 mm	Upstream from injector
PP-ODSIII ϕ4.6 x 30 mm	microdialysis	6	DA, 5-HT		CA-ODS	ϕ 4 x 5 mm	Upstream from injector
SC-5ODS ϕ2.1 x 150 mm	microdialysis	2～4	Monoamine and Metabolites, etc.		AC-ODS	ϕ 4 x 5 mm	Upstream from injector
	Other than microdialysis	2～4			AC-ODS	ϕ 3 x 4 mm	Just before the separation column
	Other than microdialysis	4～			CA-ODS	ϕ 3 x 4 mm	Just before the separation column
SC-5ODS ϕ3.0 x 150 mm	Other than microdialysis	2～4	Monoamine and Metabolites, etc.		AC-ODS	ϕ 4 x 5 mm	Just before the separation column
	Other than microdialysis	4～			CA-ODS	ϕ 4 x 5 mm	Just before the separation column
CA-5ODS ϕ2.1 x 150 mm	microdialysis	5～6	Monoamine		CA-ODS	ϕ 4 x 5 mm	Upstream from injector
	Other than microdialysis	5～6			CA-ODS	ϕ 3 x 4 mm	Just before the separation column
AC-GEL ϕ2.0 x 150 mm	microdialysis		Acetylcholine		CH-GEL	ϕ 4 x 5 mm	Upstream from injector
	Other than microdialysis				CH-GEL	ϕ 3 x 4 mm	Just before the separation column
AC-GEL ϕ4.6 x 150 mm	Other than microdialysis		Acetylcholine		CH-GEL	ϕ 4 x 5 mm	Just before the separation column
GU-GEL ϕ4.6 x 150 mm	microdialysis		Glutamate		CH-GEL	ϕ 4 x 5 mm	Upstream from injector
	Other than microdialysis				CH-GEL	ϕ 4 x 5 mm	Just before the separation column

Guidelines for precolumn replacement

1. Microdialysis sample → Approx. **500** samples
2. Tissue homogenized sample for monoamine analysis → Approx. **100 - 200** samples
3. Tissue homogenized sample for acetylcholine analysis → Approx. **50 - 100** samples
4. Blood sample → Approx. **100 - 200** samples

In other cases, refer to items 1 to 4 above.

Also, if the pressure exceeds **1MPa** in the precolumn only, it is recommended to replace it.

List of precolumn models

Types of fillers	ϕ3×4 mm	ϕ4×5 mm
AC-ODS	PC-03-AC	PC-04-AC
CA-ODS	PC-03-CA	PC-04-CA
CH-GEL	PC-03-CH	PC-04-CH