

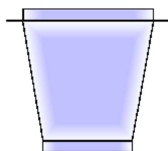
# Ex-Pure Funnel

## handling instructions

This product has a filter-type monolithic silica with uniform continuous pores on the solid surface, and protein A is immobilized using the technology of the National Institute of Advanced Industrial Science and Technology. Both technologies have made it possible to purify IgG antibodies easily and in a short time.

### 1 . introduction

After opening the package, check that there are no abnormalities in the contents of the package, the appearance of the tip, the quantity, the solvent, etc.



- monolithic silica funnel column  
1 piece

1 piece



- Vacuum port for GL45 bottles (with gasket on the back)



- Adapter for suction tube  
1 piece



- Preservation case (contains 20% ethanol solution when opened)  
1 pieces

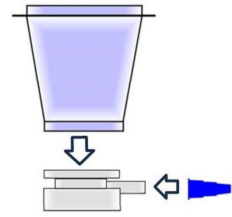
- handling instructions ( this paper )  
1 copy

### 2 . Handling Precautions

- Do not drop or hit the syringe column. Be careful not to give a strong shock, as the monolith gel and the junction with the column may come off or break.
- When removing the gasket on the back of the vacuum port by cleaning, etc., be careful not to damage it.
- When not in use, fill the column with 20% ethanol up to the level where the monolith can be submerged so that the monolith silica gel does not dry out, and store it in a refrigerator. Improper storage conditions can degrade column performance.

### 3. Operation example

Step 1 ) Remove the funnel column from the case and discard any storage solution in the column. Insert the top of the adapter (the one with the radial slit) into the bottom of the column and insert the tube adapter.



Step 2 ) Attach the adapter to the GL45 standard bottle and insert the suction hose into the tube adapter (bottle volume should be 250 mL or more, and can be increased according to the amount of antibody applied).

Step 3) Add 50 mL of adsorption solution and apply suction at 0.02 to 0.04 MPa.

Step 4) Apply up to 250 mL of the antibody sample (adjust the pH of the sample to around 7. Adsorption solution is fine) and aspirate at about 0.02 to 0.04 MPa. When performing concentration purification, it is possible to apply continuously as long as the amount does not exceed the antibody adsorption limit.

Step 5) Add 50 mL of washing solution, apply suction at about 0.02 to 0.04 MPa, and discard the solvent that has passed through..

Step 6) Place 5 mL of the neutralization solution in a clean GL45 standard 250 mL bottle, add 50 mL of the elution solution to the column, apply suction at about 0.02 to 0.04 MPa, and collect the flow-through.

for reuse)

Step 7) Add 50 mL of regenerating solution and apply suction at about 0.02 to 0.04 MPa.

Step 8) Start with adding the adsorption solution from step 1.

The amount of antibody sample that can be passed through varies depending on the sample concentration.

#### Working solution

- Adsorption solution: 50 mM sodium phosphate buffer + 150 mM NaCl (pH 7.0)
- Washing solution: 50 mM sodium phosphate buffer + 1 M NaCl (pH 7.0)
- Elution solution (ProA): 100 mM glycine-HCl buffer solution (pH 3.5)
- Regeneration solution: 100 mM glycine-HCl buffer solution (pH 2.5)
- Neutralization solution: 1 M Tris-HCl buffer solution (pH 8.5)

A solvent kit (EY-S01) that includes the above five solutions can be additionally purchased.

### 4. Storage

Keep refrigerated when not in use. Fill the inside of the spin column with 20 vol% ethanol so as not to dry the monolithic silica gel. Column performance may degrade.

"This product is manufactured for research purposes." We cannot guarantee the use of this product for purposes other than research.