



## Micro Spin Filter Column for IP, Co-IP, and Immunodepletion

### IP or Co-IP Micro Spin Filter Column (elution volume as low as 10 µl)

Cat. #	Description	Quantity	
IP111	Micro Spin Filter columns for IP, Co-IP, Immunodepletion, and affinity chromatography (Ni, GST resin etc.)	50 preps	
IP111S	Micro spin Filter columns with Elution and Neutralization Buffers	50 preps	
Ecap-A	End Caps for Micro Spin Columns and Micro Spin Filters	50	

**Note 1:** Micro Spin Filters come with 2 ml collection tubes

#### Description:

Micro Spin Filter provides an easy and efficient column method for Immunoprecipitation (IP), Co-IP, and Immunodepletion. All the procedures involve 1) incubation of an antibody with a sample that contains the protein antigen of interest, 2) capturing the antibody-antigen complex to immobilized Protein A or Protein G agarose beads, 3) washing to remove unbound components of the sample, and 4) separation of antigen and antibody from beads.

Advantage of using spin filter column

**Traditional method:** The entire procedure is performed in a microcentrifuge tube, which requires a) careful removal of solution from agarose resin after pelleted by centrifugation and b) eluting IP-complex by boiling the resin in denaturing sample loading buffer for SDS-PAGE analysis, which will denature and separate antibody into heavy and light subunits.

**Column method:** Solution can be easily separated from the beads during the wash steps and the antibody-antigen complex can be eluted by low pH buffer and neutralized for subsequent analysis instead of being denatured or cleaved into separate subunits. Furthermore, the resin often can be reused to save the cost.



#### Applications:

- \* Immunoprecipitation (IP)
- \* Co-immunoprecipitation (co-IP)
- \* Immunodepletion
- \* Other small scale affinity chromatography such as Ni-resin, GST resin etc...

Enzymax LLC: [www.enzymax.net](http://www.enzymax.net) (Tel: 859-219 8482)

#### Highlights:

- Efficiently and effectively remove contaminating proteins from beads
- No resin loss, high recovery of antigen and co-precipitated proteins
- Low pH elution provides milder and less denaturing recovery of the antibody-antigen complex
- Fast and Easy with Spin protocol
- Cost efficient by reusing affinity resin
- Filter Disc does not bind to DNA/RNA or Proteins

#### Applications:

- Immunoprecipitation (IP)
- Co-immunoprecipitation (co-IP)
- Immunodepletion
- Other small scale affinity purification (affinity chromatography) such as Ni-resin, GST resin etc.

#### Bench IP/Co-IP Protocol by Colum Method

Pre-wash 10-20µl resin in the spin filter

↓  
Add the prepared Immune Complex to the spin filter

Option: add end cap if needed ↓

Incubate at 4°C for 1-2 hours to capture the Immune Complex  
(Protein A/G resin+ Antibody+ Antigen (or cell lysate))



↓  
Spin the filter at 1,000xg for 1 minute and save the flow-through till confirming that IP was successful

↓  
Add 100µl cold wash buffer to the filter and spin at 1,000xg for 1 minute, repeat the wash 2-3 times

↓  
Add 10-30µl elution buffer to the filter and incubate at room temperature for 10 min (additional elution as needed)

↓  
Spin to collect the flow-through and add 1-3µl neutralization buffer (10x) in the collection tube if needed