

## Protein A Magnetic Beads

**CATALOG #:** 6507-1

**AMOUNT:** 1 ml

**LOT #:** \_\_\_\_\_

**PREPARATION:** Protein A Magnetic Beads are prepared by covalently coupling Recombinant Protein A (contains five IgG binding domain, BV catalog # 6500B) to 6% cross-linked magnetically beaded agarose. The coupling technique is optimized to give a high binding capacity for IgG. The capacity of IgG binding is generally greater than 25 mg of human IgG per ml of wet gel.

**CONTENTS:** Supplied as a 50% slurry in PBS with 0.02% sodium azide.

### TECHNICAL SPECIFICATIONS:

<u>Parameter</u>	<u>Description</u>
Support	Paramagnetic, spherical, 6 % cross-linked agarose
Characteristics	Recombinant Protein A
Ligand	75 – 150 µm
Particle Size	Generally >25 mg human IgG/ml wet beads
Binding Capacity	
Working	
Temperature	Room temperature
Storage Solution	PBS w/0.02% NaN <sub>3</sub>
Storage	
Temperature	4 – 8 °C
Stability:	Stable, as supplied, for at least 1 year.

**FEATURES:** Easy to use, high-binding capacity, non-adherent beads. Useful for immunoprecipitation and enrichment of IgG antibodies. High affinity for Fc region of IgG antibodies from a variety of species. Protein A binds to most human and mouse IgG subclasses (e.g., human IgG1, IgG2, IgG4; mouse IgG1, IgG2a, IgG2b, IgG3). It also binds to total IgG from cow, guinea pig, hamster, horse, pig, and rabbit. Protein A has little affinity to chicken, goat, rat and sheep.

### SUGGESTED PROTOCOL:

Prepare the antibody solution by diluting the required amount of antibody in binding buffer before running the protocol.

1. Magnetic Bead Preparation (perform three times)
  - a. Dispense the required amount of magnetic beads into a 1.5 ml microfuge tube.
  - b. Place the tube in the magnetic rack and remove the storage solution.
  - c. Add 500 µl binding buffer.
  - d. Resuspend the beads.
  - e. Remove the liquid
2. Antibody Capture
  - a. Immediately add the antibody solution.
  - b. Resuspend and mix (slow end-over-end) for at least 15 minutes.
  - c. Remove the liquid.
3. Washing
  - a. Add 500 µl Binding Buffer containing 0.5 M NaCl; Remove the liquid.
  - b. Add 500 µl Binding Buffer; Remove the liquid.
4. Target Binding
  - a. Add sample diluted in binding buffer.
  - b. Incubate with slow end-over-end mixing for up to 60 minutes.
  - c. Remove and collect unbound fraction.
5. Washing ( perform three times)
  - a. Add 500 µl wash buffer
  - b. Remove liquid (save washes to troubleshoot)
6. Elution (perform three times)
  - a. Add 2 volumes elution buffer (vs. bead volume).
  - b. Completely resuspend beads and incubate at least 2 minutes.
  - c. Remove and collect elution fraction.

### RECOMMENDED BUFFER EXAMPLES:

**Binding buffer:** 50 mM Tris, 150 mM NaCl, pH 7.5

**Wash buffer:** 50 mM Tris, 150 mM NaCl, pH 7.5 (or add 1% Octylglucoside to this buffer)  
(Could also try 1X PBS as both binding and wash buffer)

**Elution buffer:** 0.1 M -0.2 M Glycine pH 2.5-3.1 (or 0.1 M citric acid, pH 2.5-3.1 or 2.5 % Acetic Acid)

### RELATED PRODUCTS:

Recombinant Protein A	Protein A Sepharose	Protein G Magnetic Beads
Recombinant Protein G	Protein G Sepharose	Protein L Magnetic Beads
Recombinant Protein L	Protein L Sepharose	Protein L Magnetic Beads
Recombinant Protein A/G	Protein A/G Sepharose	Protein A/G Magnetic Beads
Recombinant Protein A/G/L	Protein A/G/L Sepharose	Protein A/G/L Magnetic Beads
Protein G Polyclonal Antibody	Protein G-Biotin	Protein G-FITC
Protein A Polyclonal Antibody	Protein G coated Plate	
Protein L Polyclonal Antibody		

**FOR RESEARCH USE ONLY! Not to be used on humans.**