

## Protein G Magnetic Beads

**CATALOG #:** 6517-1

**AMOUNT:** 1 ml

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

**PREPARATION:** Protein G Magnetic Beads are prepared by covalently coupling Recombinant Protein G (contains three IgG binding domain, BV catalog # 6510-10) to 6% crosslinked 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 15 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 Characteristics	Paramagnetic, spherical, 6 % cross-linked agarose
Ligand	Recombinant Protein G
Particle Size	75 – 150 µm
Binding Capacity	Generally >15 mg rabbit IgG/ml wet beads
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/APPLICATIONS:** 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.

### SUGGESTED PROTOCOL:

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

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

### RECOMMENDED BUFFER EXAMPLES:

<b>Binding buffer:</b>	50 mM Tris, 150 mM NaCl, pH 7.5
<b>Wash buffer:</b>	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)
<b>Elution buffer:</b>	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 A 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.**