

Protein G Magnetic Beads

CATALOG NO: 6517-1

AMOUNT: 1 ml

PREPARATION: Protein G Magnetic Beads are prepared by covalently coupling Recombinant Protein G (contains three IgG binding domain, BV catalog # 6510-10) to 4% crosslinked magnetically beaded agarose. The coupling technique is optimized to give a high binding capacity for IgG. The capacity of IgG binding is generally >15 mg rabbit IgG/ml of wet beads.

CONTENTS: 1ml, supplied at 200 µl beads/ml in PBS containing 20% ethanol

TECHNICAL SPECIFICATIONS:

<u>Parameter</u>	<u>Description</u>
Support Characteristics	Paramagnetic, spherical, 4% cross-linked agarose
Ligand	Recombinant Protein G
Particle Size	20 - 75 µm
Binding Capacity	Generally >15 mg rabbit IgG/ml wet beads
Working Temperature	Room temperature
Storage Solution	PBS with 20% ethanol
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.

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 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		

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