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 20% ethanol.

TECHNICAL SPECIFICATIONS:

Parameter	Description
Support	Paramagnetic, spherical, 6 % cross-linked
Characteristics	agarose
Ligand	Recombinant Protein A
Particle Size	75 – 150 μm
Binding Capacity	Generally >25 mg human IgG/ml wet beads
Working Temperature	Room temperature
Storage Solution	20% Ethanol
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
Recombinant Protein G
Recombinant Protein L
Recombinant Protein A/G
Recombinant Protein A/G/L
Protein G Polyclonal Antibody
Protein A Polyclonal Antibody
Protein L Polyclonal Antibody

Protein A Sepharose
Protein G Sepharose
Protein L Sepharose
Protein A/G Sepharose
Protein A/G/L Sepharose
Protein G-Biotin
Protein G coated Plate

Protein G Magnetic Beads
Protein L Magnetic Beads
Protein L Magnetic Beads
Protein A/G Magnetic Beads
Protein A/G/L Magnetic Beads
Protein G-FITC

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