

## Goat Anti-Mouse IgG Magnetic Beads



1-800-632-7799  
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www.neb.com



S1431S 007120714071

# S1431S

20 mg

Lot: 0071207

Store at 4°C (Do not freeze)

Exp: 7/14

**Description:** An affinity matrix for the small-scale immunomagnetic separation and purification of mouse IgG's. Anti-Mouse IgG is covalently coupled to a nonporous paramagnetic particle. This secondary antibody binds the heavy chain of mouse IgG and is suitable for immunoassays that employ a mouse IgG primary monoclonal antibody. Cell separations and sorting can be accomplished using a mouse IgG antibody to defined cell surface antigens.

Supplied as a 1 ml suspension in PBS Buffer (pH 7.4), containing 0.05% Tween 20, 0.1% BSA and 0.05% NaN<sub>3</sub>.

### Specifications:

**Particle Concentration:** 3.65 x 10<sup>10</sup> particles/ml

**Support Matrix:** 1 µm nonporous paramagnetic microparticle.

**Binding Capacity:** 1 mg of Goat Anti-Mouse IgG Magnetic Beads will bind 5 µg of mouse IgG.

Note: The amount of antibody required for optimal coating of the beads will vary with the mAb affinity and the antigen density on the cell surface. Optimal experimental conditions should be determined by titration on an individual basis.

### Protocol

**Cell separation by direct method:** Thoroughly suspend goat-anti mouse IgG magnetic particles by vortexing followed by end over end mixing for at least 1 hour at 4°C.

1. Aliquot 10 µl of bead solution to clean microcentrifuge tube and wash 3X with 1 ml of cold 1X PBS (pH 7.5) or sterile media containing antibiotics.
2. Add 5–10 µg of antibody to 20 µl 1X PBS and add to washed magnetic beads. Incubate at 4°C with agitation for at least 1 hour.
3. Place tube in NEB Magnetic Separation Rack to pull beads to the side of the tube and decant supernatant being careful not to disturb bead pellet.
4. Wash 4X as in step 2. Suspend beads in 100 µl of storage buffer appropriate for the primary antibody.

5. Incubate primary antibody coated beads with heterogeneous cell suspension for 30 minutes at 4°C. Gently agitate the incubating suspension every 10 minutes. Use a magnetic bead to target cell ratio of greater than or equal to 5 magnetic beads per target cell. Incubation volume should be at least 1 ml for > 1 x 10<sup>7</sup> cells to reduce non-specific binding and clumping. Addition of 5% Fetal Bovine Serum to media and buffers may also serve to reduce non-specific binding.
6. Magnetically separate beads to the side of the tube for at least 10 minutes. Save the supernatant for a negative selection or save the magnetic pellet for a positive selection.
7. Cultured cells may detach from magnetic beads by incubating cells for up to 48 hours. Proteases such as chymopapain and trypsin can be used in some instances to release cells or interrupt antigen-antibody interaction.

CERTIFICATE OF ANALYSIS

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