Goat Anti-Rat IgG Magnetic Beads

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

S1433S 002130416041

S1433S

20 mg **Lot: 0021304**

Store at 4°C (Do not freeze) **Exp: 4/16**

Description: An affinity matrix for the small-scale immunomagnetic separation and purification of rat IgG's. anti-Rat IgG is covalently coupled to a 1µm nonporous paramagnetic particle. This secondary antibody binds the Fc portion of all monoclonal rat IgG subclasses and is suitable for immunoassays that employ a rat IgG primary monoclonal antibody. Cell separations and sorting can be accomplished using a rat IgG antibody to defined cell surface antigens.

Supplied as a 1 ml suspension in PBS Buffer (pH 7.4), containing 0.05% Tween 20 and 0.05% NaN_3.

Specifications:

Particle Concentration: 3.65 x 10^{10} particles/ml.

Support Matrix: 1 µm non-porous superparamagnetic microparticle.

Binding Capacity: 1 mg of Goat Anti-Rat IgG Magnetic Beads will bind 5 µg of rat IgG.

Note: The amount of antibody required for optimal coating of the beads will vary with the antibody Ab 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 Rat 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 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 10^7 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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