BioMag® Plus Goat anti-Mouse IgG Particles &
BioMag® Plus Goat anti-Mouse IgG Antibody Coupling Starter Kit
Catalog Numbers: 86021, 86020

DESCRIPTION
BioMag® and BioMag® Plus superparamagnetic microparticles are utilized in the magnetic separation of cells, organelles, proteins, immunoglobulins, nucleic acids, and many other types of molecules in biological and non-biological systems. The irregular shape of BioMag® and BioMag® Plus particles affords a much greater surface area than that of the same size spherical particles. This large surface area results in high binding capacities, allowing efficient target capture with minimal amounts of particles. Additionally, their greater than 90% iron oxide content allows for faster magnetic separations, especially on automated high throughput platforms.

BioMag® Plus particles are similar to conventional BioMag® particles with the distinctions of having reduced size distribution and that all BioMag® Plus particles are offered in kits as the principle component.

Bangs offers the BioMag® Plus Goat anti-Mouse Antibody Coupling Kit for the attachment of antibodies to BioMag® Plus superparamagnetic particles. The contents of the kit are sufficient for five coupling reactions. To use the kit for smaller or larger samples, adjust all volumes in a proportional manner.

Material Required
- 15mL conical centrifuge tubes: 5 tubes
- 1mM Na2EDTA): 250ml
- BioMag® Plus Goat anti-Mouse IgG Particles

Material Supplied
- 1ml (1mg) will bind >.20mg of mouse IgG
- 1mg/ml in phosphate buffered saline (pH 7.4), 1mM EDTA, 0.1% (w/v) NaN3: 25ml
- Coupling / Wash Buffer (1x PBS, 1% (w/v) BSA, 0.1% (w/v) NaN3, 1mM Na2EDTA): 250ml
- 15mL conical centrifuge tubes: 5 tubes
- BioMag® MultiSep Magnetic Separator

PROCEDURE
Researchers are advised to optimize the use of particles in any application, as procedures designed by other manufacturer’s may not be ideal.

Coupling Procedure
1. Transfer 5ml aliquot of BioMag® Plus Goat anti-Mouse IgG particles to the 15ml centrifuge tube.
2. Magnetically separate the particles until the solution has cleared.
3. Using a pipette or vacuum aspiration method, carefully remove the supernatant and discard.
4. Remove the container from the magnetic field. Add an equal amount of Wash Buffer to the particles and mix by inversion to resuspend the BioMag® Plus Goat anti-Mouse IgG particles.
5. Repeat Steps 2-4 two more times (for a total of 3 washes).
6. After the last wash, resuspend the particles to the original volume.
7. Determine and add an appropriate amount of monoclonal antibody required for coupling based on the mass of goat anti-Mouse IgG. Generally, antibody concentrations of 20-100 µg/mg of particles have been used successfully.
8. Mix by inversion and place tube on a mixer (rotator). Incubate the sample at room temperature for a minimum of 2 hours or as long as 16 hours when incubated at 2-8°C.

Binding Capacity: 1ml (1mg) will bind >.20mg of mouse IgG

CHARACTERISTICS
Mean Diameter: ~1.5µm
Particle Concentration: 1 mg/ml

MATERIAL

Should any of our materials fail to perform to our specifications, we will be pleased to provide replacements or return the purchase price. We solicit your inquiries concerning all needs for life sciences work. The information given in this bulletin is to the best of our knowledge accurate, but no warranty is expressed or implied. It is the user’s responsibility to determine the suitability for their own use of the products described herein, and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as a recommendation to use any product or to practice any process in violation of any law or any government regulation.

Washing and Diluting Coupled Particles

1. After the incubation, remove the sample from the mixer and magnetically separate the particles from the solution. Carefully remove the supernatant and discard.
2. Resuspend the particles to the coating volume with cold Wash Buffer. Return the flask to a rotator and mix for 30 minutes at room temperature.
3. Repeat Steps 1-2 three more times without the 30 minute mixing step.
4. After the last wash, magnetically separate the BioMag® Plus particles from solution and resuspend the particles with cold Wash Buffer to the volume desired. Store the coupled BioMag® Plus particles at 4°C until further testing.

STORAGE AND SAFETY

Storage Store at 4°C. Freezing, drying, or centrifuging particles may result in irreversible aggregation and loss of binding activity.

Safety This particle suspension contains sodium azide. Sodium azide may react with lead and copper plumbing to form explosive metal azides. Upon disposal of material, flush with a large volume of water to prevent azide accumulation. Please consult the Safety Data Sheet for more information.

This product is for research use only and is not intended for use in humans or for in vitro diagnostic use.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Description</th>
<th>Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>86021-50</td>
<td>BioMag® Plus Goat anti-Mouse IgG Particles</td>
<td>50ml</td>
</tr>
<tr>
<td>86020-1</td>
<td>BioMag® Plus Goat anti-Mouse Particle Antibody Coupling Starter Kit</td>
<td>1 kit</td>
</tr>
</tbody>
</table>

TO ORDER

In The U.S.
- Call: 1(800) 523-2575 • (215) 343-6484
- Fax: 1(800) 343-3291 • (215) 343-0214

In Germany
- Call: +(49) 06201-845200
- Fax: +(49) 06201-8452020

In Asia
- Call: (886) 2 8712 0600
- Fax: (886) 2 8712 2677

Order online anytime at www.polysciences.com