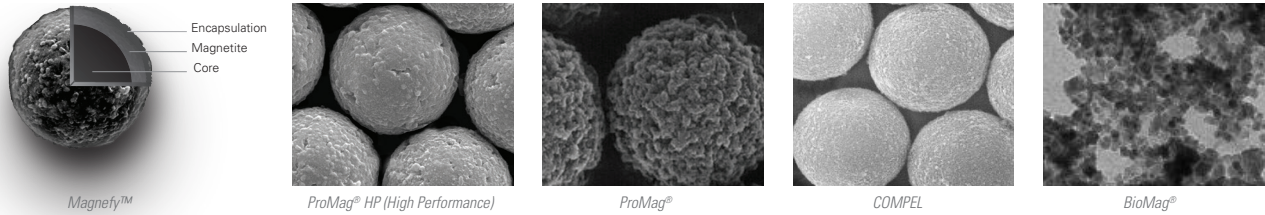


Magnetic Particle Selection Matrix

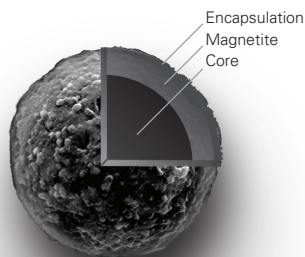
Choosing the right magnetic particle just got a whole lot easier.



Superparamagnetic particles have been utilized extensively in diagnostic and other research applications for the isolation of nucleic acids, proteins, glycans and cells. They confer a number of benefits, including ease of separation and suitability for automation. Magnetic particle-based diagnostic assays demand the highest performance in terms of physical handling, ligand binding characteristics, and signal-to-noise ratios. Bead composition directly impacts settling and magnetic separation profiles, which have implications for assay parameters such as incubation times for binding and elution steps, buffer changes, etc. Most importantly, the composition impacts specific / nonspecific binding characteristics, and background signal arising from the particle itself. These factors have a direct impact on the sensitivity and dynamic range of the assay.

Our comprehensive magnetic particle offerings allow us to address the unique requirements of specific assay and separation systems, with options for particle diameter, morphology, surface properties, separation profile, and other characteristics. No other company offers such a complete collection for your screening and development efforts. We synthesize at scales that will carry you from R&D through manufacturing, and under an ISO 13485 Quality System that will meet your regulatory needs. We invite you to explore the vast technical resources on our website, or to contact us directly to discuss your next development project.

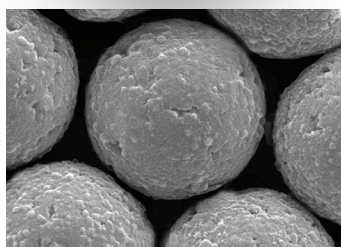
	<i>ProMag® HP COOH</i>	<i>ProMag® HP SA</i>	<i>ProMag® COOH</i>	<i>ProMag® SA</i>	<i>ProMag® Protein G</i>	<i>Magnefy™ COOH</i>	<i>Magnefy™ SA</i>	<i>BioMag® SA</i>	<i>BioMag® COOH</i>	<i>BioMag® Protein A or Protein G</i>	<i>BioMag® WGA or ConA</i>	<i>BioMag® anti-CD marker</i>	<i>BioMag® (primary antibody)</i>	<i>BioMag® secondary antibody</i>	<i>BioMag® Oligo dT(20)</i>	<i>COMPEL™ COOH</i>	<i>COMPEL™ SA</i>
Assays	Chemiluminescence	●	●	●	●	●	●	●	●								
	Immuno	●	●	●	●	●	●	●	●							●	●
	Molecular	●	●	●	●	●	●									●	●
	Flow cytometric															●	●
Isolations	Antibodies				●				●								
	Proteins	●	●	●	●			●	●							●	●
	Glycans, glycoproteins										●						
	Cells			●	●							●		●			
	Subcellular organelles							●	●	●		●					
	Immunoprecipitates			●	●			●	●				●				
	mRNA														●		
	DNA (total-SPRI)					●			●								
	DNA (specific sequence)	●	●	●	●	●		●	●								●
	Biopanning			●	●			●	●							●	●



Magnefy™ (nominal values)

Diameter: 1µm **Matrix:** Polymer **Versions:** COOH, SA **Shape:** Spheroid

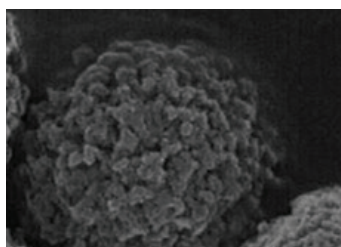
Meet Magnefy™, our ~1µm high-performance superparamagnetic microspheres. As high surface area / high surface titer microparticles with a rapid separation profile, Magnefy offer a performance-driven solid phase for magnetic particle-based applications, including SPRI-based total DNA isolation (COOH), and molecular- and immunoassays. (See PDS 756)



ProMag HP® (nominal values)

Diameter: 3µm **Matrix:** Polymer **Versions:** COOH, Streptavidin **Density (g/cm³):** 1.4 (3µm) **Shape:** Spherical

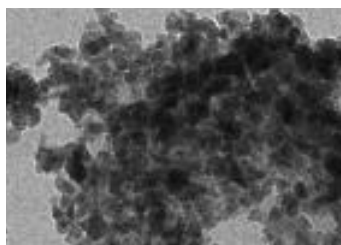
ProMag HP (High Performance) magnetic particles that have been meticulously engineered for use in chemiluminescence assay development. ProMag HP bring together the superior handling and fast separation rates of ProMag with a highly optimized composition to ensure the lowest autosignal, particularly with respect to chemiluminescence and exposed iron. (See PDS 743)



ProMag® (nominal values)

Diameters: 1µm, 3µm **Matrix:** Polymer **Versions:** COOH, Streptavidin, NH₂, Protein G (3µm) **Density (g/cm³):** 1.8 or 1.6* (diameter dependent) **Shape:** Spherical

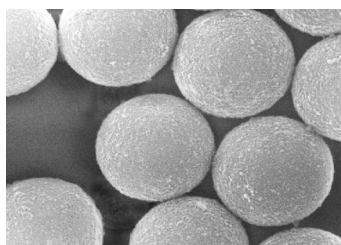
ProMag support diagnostic applications that require highly uniform, high-binding beads and fast separation times. They have a proprietary surface to reduce nonspecific binding in protein-based systems, and for superior handling without the use of surfactant. (See PDS 715)



BioMag® (nominal values)

Diameters: ~1.5µm **Matrix:** Silanized iron oxide **Versions:** COOH, NH₂, Affinity Binding Proteins, Secondary Antibodies, Anti-CD Antibodies **Density (g/cm³):** 2.5 **Shape:** Irregular, cluster

BioMag® and BioMag®Plus are ~1.5µm high-performance superparamagnetic microparticles widely used for the efficient separation of cells and purification of biomolecules. The irregular morphology of these silanized iron oxide clusters provides a much greater surface area than similarly-sized spherical particles, resulting in high binding capacities and efficient capture of target with conservative use of particles. The high iron oxide content (>90%) allows for rapid and efficient magnetic separations, even from difficult, e.g. highly viscous, samples.



COMPEL™ (nominal values)

Diameters: 3, 6, and 8µm **Matrix:** Polymer **Versions:** COOH, Streptavidin, Fluorescent **Density (g/cm³):** 1.1 - 1.2* (diameter dependent) **Shape:** Spherical

As highly uniform microspheres in diameters of 3, 6, and 8µm, COMPEL™ are ideal for applications in flow cytometry. These beads contain a highly optimized amount of magnetite to minimize settling during incubation steps, while ensuring rapid separation times. COMPEL™ beads are ideal for applications that demand uniform bead response, such as miniaturized bioassays and separations. The polymer matrix is conducive to dyeing, and standard blue, green, and red fluorescent versions are available. In fact, we like to dye them so well that we used them to develop QuantumPlex™™, our magnetic bead platform for suspension arrays. (See PDS 705)

Still not sure? Check out our Magnetic Sampler Packs (carboxylated or streptavidin coated).

Contact us to discuss your project today, or order anytime at BangsLabs.com.