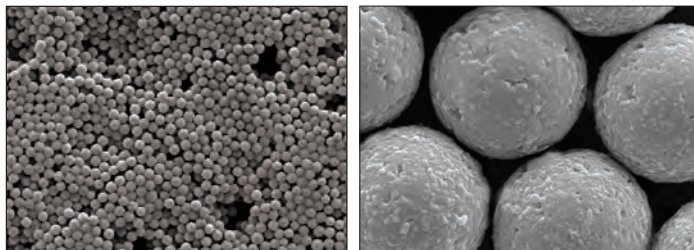


DESCRIPTION

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 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.

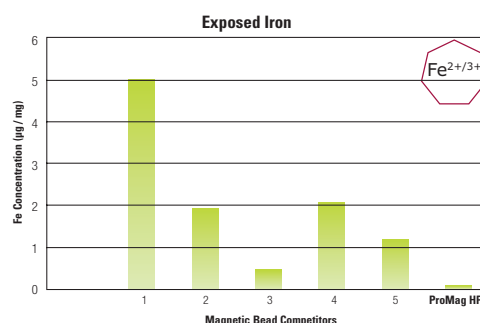
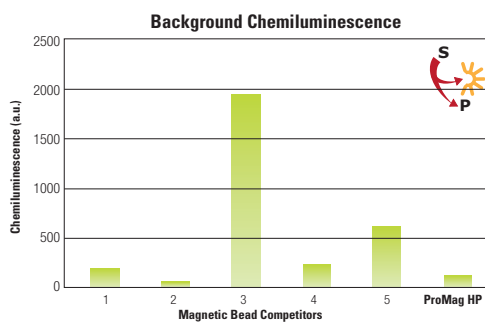


ProMag® HP Carboxyl

Bangs is pleased to offer ProMag® HP (High Performance), our new generation of magnetic particles that has been meticulously engineered for use in 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.

Chemiluminescence

ProMag® HP have exceptionally low background chemiluminescence compared to several competing products, as demonstrated using an H₂O₂ chemiluminescence assay.

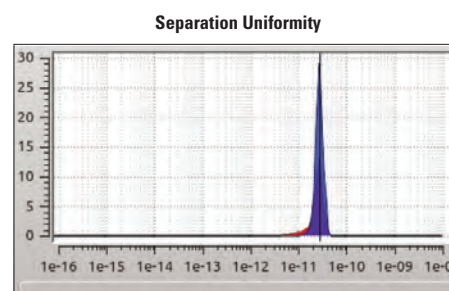
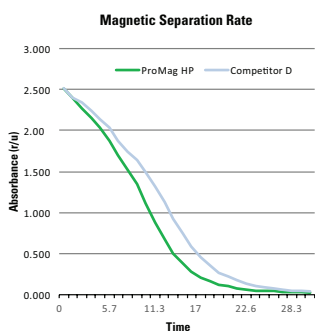


Iron Sequestration

Metal cations are a source of interference in chemiluminescence assays. ProMag® HP have highly sequestered iron compared to several competing products, as demonstrated through a colorimetric assay for iron.

Magnetic Response

ProMag® HP microspheres offer uniform and rapid separations, which are critical to the reproducibility of automated assays.



Magnetophoretic Mobility via IKOTECH Hyperflux Velocimeter which demonstrates uniform separation rate.

CHARACTERISTICS

PMC3HP - ProMag® HP COOH

Mean Diameter: 3µm
% Solids: 2.5% (COOH), Surfactant-free
Buffers: DI Water+0.05% NaN₃

General covalent coating protocols are provided in *TN205 Covalent Coupling* and *PDS 644, PolyLink Protein Coupling Kit for COOH Microspheres*.

PMS3HP - ProMag® HP Streptavidin

Mean Diameter: 3µm
% Solids: 1% (Streptavidin)
Buffers: 100mM Borate (pH 8.5) + 0.1% Casein 0.05% Tween® + 10 mM EDTA + 0.09% NaN₃

Binding capacity is determined using a biotin-FITC assay, and Lot-specific results are reported on the Certificate of Analysis. General binding protocols that may be used as a starting point for optimization are provided in *TN101 Affinity Ligand Microspheres* as well as *PDS 721 Streptavidin Coated Microspheres*. For additional information, see the Tech Support section of our website.

STORAGE AND STABILITY

Store at 2-8°C. Freezing of particles may result in irreversible aggregation and loss of binding activity. For the streptavidin version an expiration date that is 12 months from the date of shipment is assigned; stability testing continues through 36 months from date of manufacture.

SAFETY

All particle suspensions contain 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 Sheets 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

Cat. Code	Description	Size
PMC3HP	ProMag® HP 3 Series • COOH	5mL, 25mL
PMS3HP	ProMag® HP 3 Series • Streptavidin	1mL, 2mL, 5mL, 10mL

Order online anytime at www.bangslabs.com.