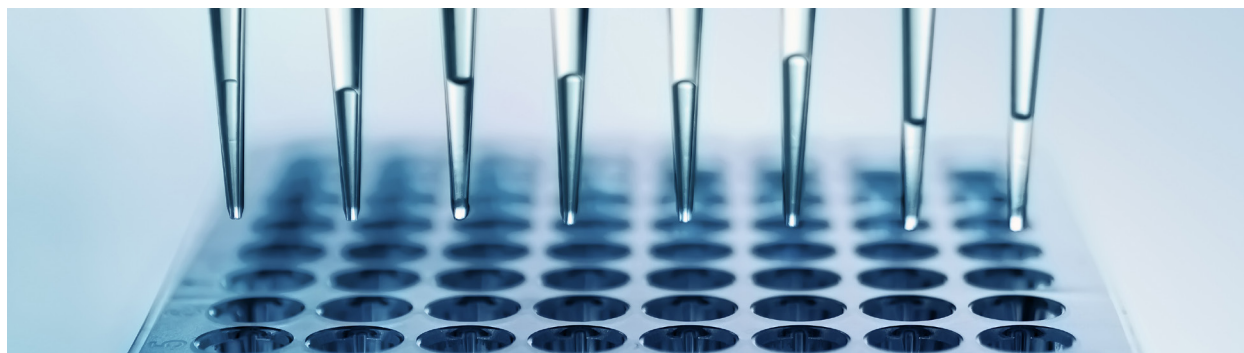


# Magnetic Particles for Assay Development

**Our superparamagnetic microparticles allow us to address a wide range of applications in the life sciences, including immunoassays, molecular assays, nucleic acid and other cellular & biomolecular isolations.**



The high sensitivities, broad dynamic ranges, simple instrumentation and rapid results that characterize chemiluminescence and other assays make them well-suited to quantitative measurement of low analyte concentration in immuno- and molecular diagnostic applications. Whether developing assays for fully automated or laboratory-built analyzers, there are many design elements to consider, including assay format, sensitivity, emitter / luminescence system, and solid phase.

Molecular and immunoassays have featured a variety of magnetic particles as the solid phase to effectively capture target, enhance sensitivity, and support automation. Bangs' comprehensive line of magnetic particles allows us to address the unique requirements of a multitude of assay systems, with options for particle diameter, surface functionality, morphology, magnetic separation profile, and other characteristics. To facilitate particle selection and optimization, we have assembled Magnetic Sampler Packs featuring our most popular carboxyl (COOH) and streptavidin (SA) particles, including our newest addition, Magnefy™. See datasheets for additional product details.

MAGNETIC PARTICLES FOR ASSAYS						
Catalog Number	Product Description	Nominal Diameter	Morphology	Composition	Functionality	Datasheet
MFY0002, MFYS1N	Magnefy™	1.0µm	spheroid	polymer magnetic, encapsulated	COOH & SA	PDS 756
BP618, BP628	BioMag® Plus	1.5µm	irregular cluster	silanized iron oxide	COOH & SA	PDS 618,621
PMC1N, PMS1N	ProMag® 1 series	1.0µm	spherical	polymer magnetic	COOH & SA	PDS 715
PMC3N, PMS3N	ProMag® 3 series	3.0µm	spherical	polymer magnetic	COOH & SA	PDS 715
PMC3HP, PMS3HP	ProMag® HP	3.0µm	spherical	polymer magnetic, encapsulated	COOH & SA	PDS 743
21940	Magnetic Streptavidin Sampler Pack	MFYS1N, Magnefy™ 1 SA - 1mL (1% solids) 10mg/mL PMS1N, ProMag 1 Series SA - 1mL (1% solids) 10mg/mL PMS3HP, ProMag HP 3µm SA - 1mL (1% solids) 10mg/mL BP628, BioMagPlus SA - 2mL (0.5% solids) 5mg / mL			SA	PDS 749
21950	Magnetic COOH Sampler Pack	MFY0002, Magnefy - 5mL (5% solids) 50mg/mL PMC1N, ProMag Series 1 - 5mL (2.5% solids) 25mg/mL PMC3HP, ProMag HP 3µm - 5mL (2.5% solids) 25mg/mL BP618, BioMagPlus - 5mL (2% solids) 20mg / mL			COOH	PDS 749

## References

- Acharya D, Bastola P, Le L, Paul AM, Fernandez E, Diamond MS, Miao W, Bai F. (2016) An ultrasensitive electrogenerated chemiluminescence-based immunoassay for specific detection of Zika virus. *Sci Rep*; 6:32227.
- Dodeigne C, Thunus L, Lejeun R. (2000) Chemiluminescence as diagnostic tool. A review. *Talanta*; 51:415-439.
- Fu Z, Yan F, Liu H, Lin J, Ju H. (2008) A channel-resolved approach coupled with magnet-captured technique for multianalyte chemiluminescent immunoassay. *Biosens Bioelectron*; 23:1422-1428.
- Fujita K, Kinukawa H, Ohno K, Ito Y, Saegusa H, Yoshimura T. (2015) Development and evaluation of analytical performance of a fully automated chemiluminescent immunoassay for protein induced by vitamin K absence or antagonist II. *Clin Biochem*; 48:1330-1336.
- Mahler M, Bentow C, Serra J, Fritzler MJ. (2016) Detection of autoantibodies using chemiluminescence technologies. *Immunopharmacol Immunotoxicol*; 38(1):14-20.
- Zhang H, Yu D, Zhao Y, Fan A. (2014) Turn-on chemiluminescent sensing platform for label-free protease detection using streptavidin-modified magnetic beads. *Biosens Bioelectron*; 61:45-50.





**Bangs Laboratories** manufactures a variety of magnetic, polymeric and silica microsphere products setting the standards for diagnostic, research, and flow cytometry applications. No matter the project, we have a product that serves or we'll work to custom-design a solution to fit. And that's not the half of it.


We also stand behind our products. Regardless of the size of your question or the size of your company, we offer tech support, absolutely free.

**Sound interesting?** 

Visit: [www.bangslabs.com](http://www.bangslabs.com)

 [@particledoc](https://twitter.com/particledoc)

 [info@bangslabs.com](mailto:info@bangslabs.com)

 800.387.0672