

# **Nucleic Acid Isolations & Assays**

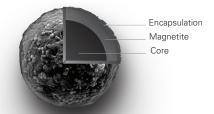
# Make your molecular applications more cost effective & efficient with Magnefy™



### **OVERVIEW**

Superparamagnetic particles have been utilized extensively in diagnostics and other research applications for the purification of cells and biomolecules, such as antibodies, nucleic acids, and polypeptides. They confer a number of benefits, including ease of separation and suitability for automation. When coated with recognition molecules, magnetic microspheres are ideal for the efficient capture and separation of target. Unwanted sample constituents may be washed away following a simple magnetic separation step.

Magnetic particles are also used extensively in nucleic acid isolations, and we are proud to present our newest magnetic particle offering—Magnefy<sup>TM</sup>. Magnefy offer an additional performance-driven solid phase for magnetic particle-based assays and isolations, including SPRI-based\* total DNA isolation. (\*Solid phase reversible immobilization, which features the isolation of high-purity nucleic acid in the presence of NaCl and PEG.) See datasheet 756 for additional product details.

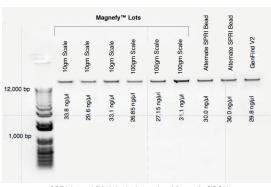


## **DESCRIPTION**

Magnefy<sup>TM</sup> are encapsulated core-shell ~1µm magnetic particles with either a carboxylate-modified or Streptavidin (SA) coating that offer high surface area and high binding ability with a rapid uniform magnetic response profile. Magnefy<sup>TM</sup> are scaleable and automation-friendly.

# **PERFORMANCE**

You can rest easy knowing that Magnefy™ received a wide range of stress tests from our team of scientists to ensure they can tolerate a host of molecular biology processing conditions without jeopardizing bead integrity. We tested particle diameter, aggregation, magnetic separation, and exposed iron content under various extremes of salt, pH, guanidine, temperature and water washes. Magnefy™ were able to withstand these extremes as well as the competitors. They also stack up well against the competition for isolating DNA without breaking the bank.



SPRI-based DNA isolation using Magnefy COOH



#### **QUALITY**

Bangs Laboratories' over 30 years of experience in microsphere synthesis and fine particle analysis have established us as a leading manufacturer of polymer, silica and magnetic microspheres to diagnostic companies and instrument manufacturers. We understand what it takes to get new assays and instruments to market, and we have the products and the know-how to support you in your development process. We manufacture at scales that will carry you from R&D through production, and under an ISO 13485:2016 Quality System that will meet your regulatory needs. Our dyeing, coating and surface modification capabilities are demonstrated in our specialty products for bioseparations and instrument standardization, and we are also pleased to offer custom formulations, concentrations, and packaging. Give us a call and let us put our decades of real-world experience to work for you!

### **REFERENCES**

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- Meyer M, Stenzel U, Hofreiter, M. (2008). Parallel tagged sequencing on the 454 platform. Nature Protoc; 3(2), 267.
- Elkin CJ, Richardson PM, Fourcade HM, Hammon NM, Pollard MJ, Predki PF, et al. (2001). High-throughput plasmid purification for capillary sequencing. Genome Res; 11(7), 1269-1274.
- Hawkins TL, O'Connor-Morin T, Roy A, Santillan C. (1994). DNA purification and isolation using a solid-phase. Nucleic Acids Res; 22(21), 4543-4.

	MAGNEFY™	
Cat.#	Product Description	
MFY0002	Magnefy™ 1μm - COOH	
MFYS1N	Magnefy™ 1μm - SA	
21940	Carboxyl Magnetic Sampler Pack	
21950	Streptavidin Magnetic Sampler Pack	

