



**Thermo Scientific
Seradyn Product Catalog**



Microparticle Technologies



Monoclonal Antibodies



Diagnostic Reagents

Complete Technology Innovation and Experience

Partner with Thermo Fisher Scientific—the world leader in microparticle technology—for all your diagnostic and molecular biology needs.

Offer You the Following Outsourcing Capabilities:

Application Optimization

- Custom Microparticle Synthesis
- Custom Microparticle Coupling
- Immunoassay Reagent Development
- Contract Research
- Feasibility Assessment
- Design Control
- Regulatory Filing

Contract Manufacturing

- Customized Packaging
- Inventory Management
- Compliant Quality Systems (ISO-13485, cGMP)
- Bulk Formulation
- Kit Assembly
- Packaging
- Labeling

Technical Support

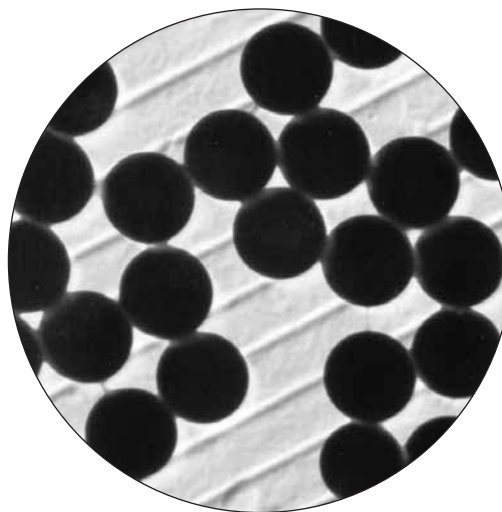
- Reagent Optimization
- Application Support
- Analytical Services

As a trusted supplier to the scientific community with more than 25 years of microparticle technology experience, we are proud of our reputation as one of the world's leaders in the design and manufacture of high quality synthetic polymer microparticles.

Whether for the manufacture of immunodiagnostic assays or systems for nucleic acid isolation, Thermo Scientific Seradyn microparticles are used by the world's leading clinical and molecular diagnostic companies as an essential building block of their reagents.

In fact, Thermo Scientific Seradyn microparticle technology is the foundation of our highly acclaimed QMS (Quantitative Microparticle System) Therapeutic Drug Management (TDM) Immunoassays (see Immunoassay Technology on page 2).

Please call **1-866-737-2396** or **1-317-610-3800** for technical service, product catalogs, or pricing information.

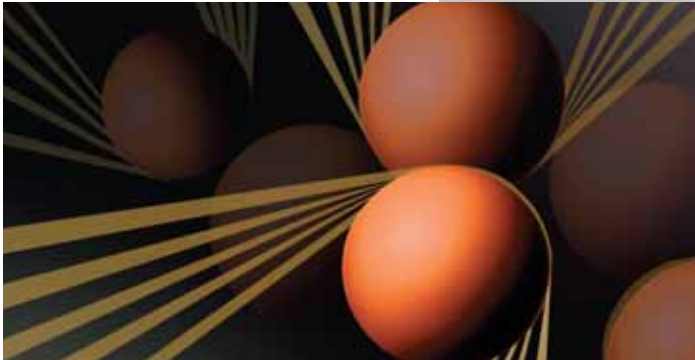


Did you know...

that approximately 85% of the US blood supply is tested by assays that utilize our microparticles.

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pricing information.

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Immunoassay Technology

For therapeutic drug management

Thermo Scientific Immunoassays

Utilizing the skills and experience of our scientists, we manufacture and sell two types of diagnostic reagents for therapeutic drug monitoring. Our more traditional Innofluor product line uses the fluorescence polarization (FPIA) method for the quantitative determination of total drug in serum. We have developed a wide variety of TDM assays with this technology.

Our newest QMS product line utilizes our world-leading microparticle technology to develop a wide-range of particle-enhanced turbidimetric immunoassays for application on general chemistry analyzers.

Our extensive R&D pipeline is tailored to addressing unmet market needs in the focused therapeutic areas detailed below.

Asthma Therapy

- Thermo Scientific Innofluor Theophylline

Cardiology

- Thermo Scientific QMS Quinidine
- Thermo Scientific Innofluor Quinidine
- Thermo Scientific Innofluor Digitoxin
- Thermo Scientific Innofluor Digoxin

Epilepsy and Pain Management

- Thermo Scientific Innofluor Carbamazepine
- Thermo Scientific QMS Lamotrigine
- Thermo Scientific Innofluor Phenobarbital
- Thermo Scientific Innofluor Phenytoin
- Thermo Scientific QMS Topiramate
- Thermo Scientific Innofluor Topiramate
- Thermo Scientific Innofluor Valproic Acid
- Thermo Scientific QMS Zonisamide
- Thermo Scientific Innofluor Zonisamide

Infection

- Thermo Scientific QMS Amikacin
- Thermo Scientific Innofluor Amikacin
- Thermo Scientific QMS Gentamicin
- Thermo Scientific Innofluor Gentamicin
- Thermo Scientific QMS Tobramycin
- Thermo Scientific Innofluor Tobramycin
- Thermo Scientific Innofluor Teicoplanin*
- Thermo Scientific QMS Vancomycin
- Thermo Scientific Innofluor Vancomycin

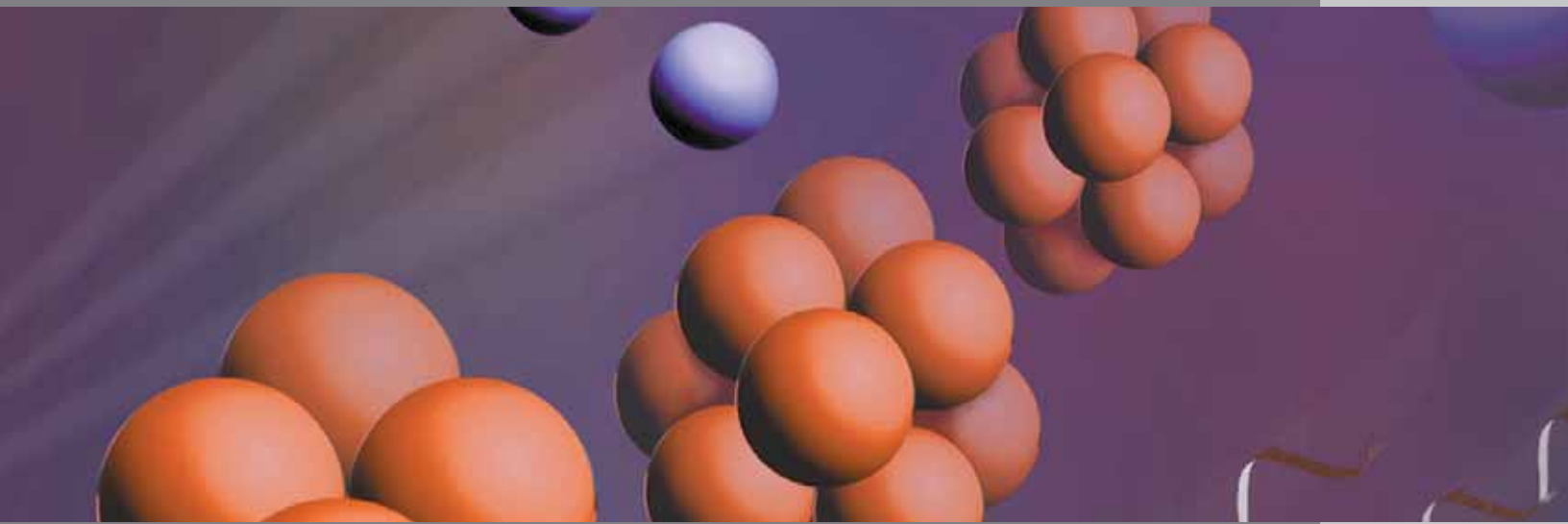
Organ Transplantation

- Thermo Scientific Innofluor Certican (everolimus)*

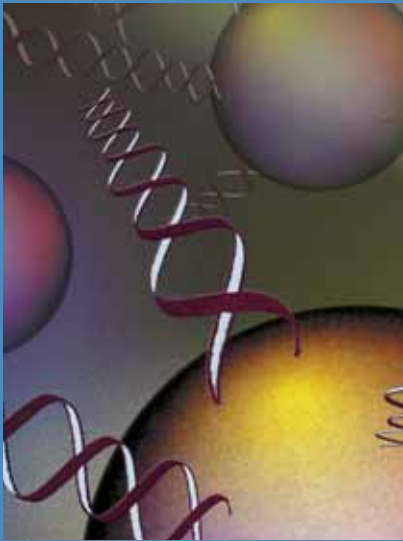
** Not available for sale in the United States*

OEM Opportunities

For more than 10 years, we have developed and supplied an extensive line of particle-enhanced immunoassays for therapeutic drug monitoring to many of the leading IVD instrument manufacturers. Contact us to discuss how our extensive menu and exclusive product offering can help your company improve patient care.



Particle Technology



Thermo Scientific Product Listing

Magnetic Particles

Sera-Mag® SpeedBeads™

Sera-Mag Magnetic Carboxylate-modified

Sera-Mag Magnetic NeutrAvidin

Sera-Mag Magnetic Streptavidin

Sera-Mag Magnetic Oligo(dT)

Polystyrene Particles

OptiBind® Polystyrene

OptiLink® Carboxylate-modified

Power-Bind™ Streptavidin Coated

Dyed/Fluorescent Particles

Color-Rich™ Dyed

Fluoro-Max™ Fluorescent Carboxylate-modified

Fluoro-Max Fluorescent Streptavidin

These particles can be manufactured in volumes from 1 to 300 liter lot sizes.

We have the expertise to provide custom coupling services. These potential projects are reviewed on a case-by-case basis. Please let us know your requirements. In some cases, a supply agreement may be required.

Superior Microparticle Technology You can count on us

Thermo Scientific Seradyn microparticles are manufactured in our ISO-13485 certified facility following a computer-aided design. You are assured of a superior product. Our microparticles feature high sensitivity and excellent reproducibility, yielding a high binding capacity while keeping nonspecific binding low and maintaining long-term stability.

Because we manufacture the particles, extensive information about their characteristics and functionality is made available to you. We provide concrete data, backed by years of clinical applications research, which will take the mystery out of working with microparticles.

We are dedicated to continuous product improvement through our in-house polymer development and biochemical research teams.

Is it important to know who is supplying your microparticles?

Yes. We manufacture superior microparticles in our own state-of-the-art facility. In the long run, our complete control over the entire manufacturing process will save you time and money.

The support you need when you need it.

Technical Support

- Assay optimization assistance
- Reagent development
- Technical applications support

Custom Services

- Custom particle synthesis
- Contract manufacturing
- Research and development
- Custom coupling

Microparticles for many different applications:

Microparticles have literally hundreds of uses in immunoassays, molecular biology and reasearch. The chart on page 5 is a representative listing of the many ways microparticles can be used. If you do not see your application, please contact us as we may have more information for you.

Microparticle selection can be confusing when trying to decide between hundreds of possibilities. Rest assured that after many years of hands-on experience, we have the right microparticle for your application. Although we manufacture up to 300 liter batch sizes, please advise us of your microparticle usage requirements so that we can confirm sufficient inventory quantities for your application

Thermo Scientific Seradyn products represent a complete range of standard microparticles to handle most diagnostic, research and molecular biology applications. All products represented in the chart on page 5 are manufactured with exacting formulations to assure consistent and reproducible results. All of our microparticles are manufactured under strict guidelines.

Microparticle Applications

Applications and Uses

Particles	PS	CM	CM-BL	CM-RD	CM-Eu	SA-MP	MG-CM	MG-SA	MG-OL	MG-NA
Aerosol studies	•	•			•					
Affinity purification						•	•	•		•
Biotinylated PCR isolation								•		•
cDNA synthesis									•	
Cell isolation							•	•		•
Chemiluminescent assays		•				•	•	•		•
Cycle sequencing cleanup								•		
Biological transport studies					•					
Fluorescent-based assays					•					
Gene expression analysis							•	•	•	•
Genomic DNA isolation							•			
High sensitivity assays	•	•			•	•	•	•		•
Lateral flow assays			•	•	•	•				
Membrane-based assays	•	•	•	•	•	•				
mRNA isolation								•	•	•
Nephelometric assays	•	•				•				
Northern analysis									•	•
Nucleic acid sample prep						•	•	•	•	•
Plasmid DNA isolation							•			
Purify PCR product		•					•	•		•
Rapid assays			•	•	•	•				
RT-PCR								•	•	•
Size standards	•	•								
Slide agglutination assays	•	•	•	•						
Time-resolved fluorescent assays					•					
Turbidimetric assays	•	•				•				
Flow cytometry		•								
Filter challenge	•	•								
Cell surface markers					•					
Phagocytosis studies	•	•			•					
Pore size determination	•	•			•					
Biosensors		•					•	•	•	•
Genotyping							•	•	•	•
Molecular diagnostics							•	•	•	•
Proteomics/Genomics							•	•	•	•

Some product abbreviations typically used are:

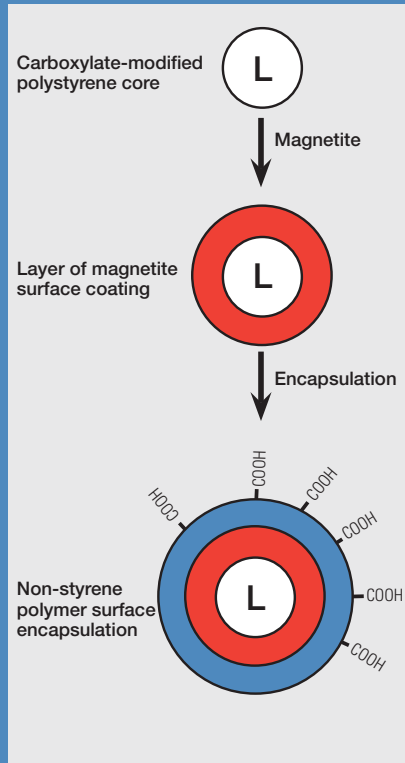
CM..... Carboxylate-modified
 PS..... Polystyrene
 RD..... Red

MG-CM Magnetic carboxyl
 BL..... Blue
 MG-SA Magnetic streptavidin

MG-OL..... Magnetic oligo(dT)
 MG-NA..... Magnetic NeutrAvidin coated
 SA..... Streptavidin coated

Thermo Scientific Seradyn Sera-Mag Magnetic Particles

Patented Sera-Mag Magnetic Core-Shell Design



World-Class Technology

The Sera-Mag family of magnetic particles is based on the patented (5,648,124) nominal 1 μM magnetic carboxylate-modified base particles (MG-CM) which are made by a core-shell process. Sera-Mag particles are used in a wide variety of molecular biology, nucleic acid isolation, research and clinical diagnostic immunoassay applications. These super-paramagnetic particles combine a fast magnetic response time with a large surface area and fast reaction kinetics.

Four Sera-Mag products are available:

- Magnetic Carboxylate-modified
- Magnetic Streptavidin
- Magnetic Oligo(dT)
- Magnetic NeutrAvidin

Molecular Biology Applications

Plasmid DNA isolation
 Genomic DNA isolation
 mRNA and PNA isolation
 Cell isolation
 Cycle sequence reaction cleanup
 Isolate biotinylated PCR product
 RT-PCR
 cDNA library construction
 Genotyping
 Subtractive hybridization
 Northern analysis
 Gene expression analysis

Clinical Diagnostics Applications

Colorimetric assays
 Heterogeneous assays
 Chemiluminescent assays

Sera-Mag Unique Properties

- Low, non-specific binding of serum proteins and other interfering substances
- Non-leaching, encapsulated magnetite
- Surfactant-free, no washing or pre-cleaning steps required
- High surface area per unit mass, high ligand binding capacity and slow settling rate in absence of a magnetic field
- Tight size distribution provides for simultaneous magnetic separation rate, efficient coating of biological reagents, and excellent lot-to-lot reproducibility
- GMP manufacturing in our ISO-13485 certified facility
- Covalently bound ligands do not leach
- High yield
- Pure preparations
- Rapid isolation in viscous solutions

Compatibility/Stability

Compatible in pH 4 to 12
 Compatible in guanidinium thiocyanate
 Compatible in DMF and DMSO
 Compatible in sonication environments
 Compatible in PCR temperature cycling
 60 month shelf-life stability

Sera-Mag Magnetic Streptavidin Particles

The Sera-Mag Magnetic Streptavidin (MG-SA) particles contain covalently bound streptavidin. Three levels of biotin-binding capacity supplied as low (2500 to 3500 pmol/mg), medium (3500 to 4500 pmol/mg) and high (4500 to 5500 pmol/mg) binding capacities are available (measured in picomoles of biotin-fluorescein bound per milligram of particle). The multiple levels allow you to choose the biotin-binding capacity needed to optimize your application. MG-SA can be used as a universal base particle for coating biotinylated proteins, oligos or other ligands to the particle surface. MG-SA have a shelf life stability of 60 months.

Sera-Mag Magnetic NeutrAvidin Particles

The Sera-Mag Magnetic NeutrAvidin (MG-NA) particles contain covalently bound NeutrAvidin. These particles have a biotin-binding capacity of 3500 to 4500 pmol/mg and offer an alternative to our MG-SA particles when non-specific binding is problematic. By contrast, the NeutrAvidin protein used for our MG-NA particles contains no carbohydrates and has a near-neutral isoelectric point of 6.3.

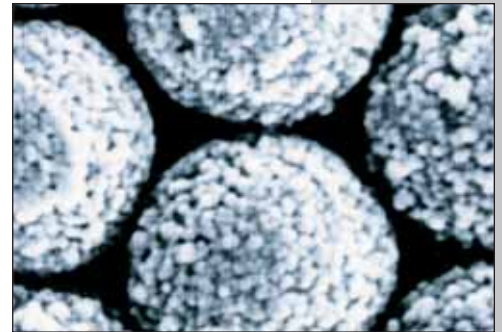
These features provide very low non-specific binding and broader utility in a variety of applications.

Sera-Mag Magnetic Oligo(dT) Particles

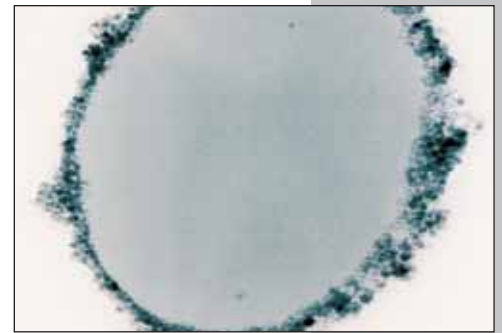
The 1 μ M Sera-Mag Magnetic Oligo(dT) (MG-OL) particles contain covalently bound oligo(dT)₁₄ and have excellent shelf life stability at 48 months. The MG-OL microparticles are colloidally stable in the absence of a magnetic field and will remain in suspension for extended periods of time during use. MG-OL are used to capture or isolate mRNA from a variety of sources. Once isolated, further applications like RT-PCR, cDNA library construction or subtractive hybridization can be performed. The approximate mRNA binding-capacity is 11 μ g of mRNA per mg of particles (dependent upon sample and message length).

The MG-OL particles can also be used as a universal base particle for coupling your unique oligo sequences. Simply synthesize your oligo with a poly-A tail for easy attachment to the oligo(dT) particles.

For technical notes, visit us at www.thermo.com/seradyn, and navigate to particle technology and click on Sera-Mag Magnetic particles.

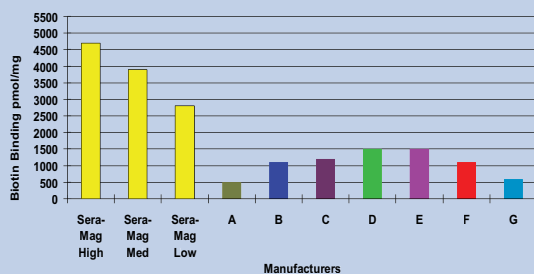


The unique cauliflower-like surface structure of Sera-Mag particles generates exceptionally high binding capacities. The particles are colloidally stable in the absence of a magnetic field and will remain in suspension for extended periods of time during use.



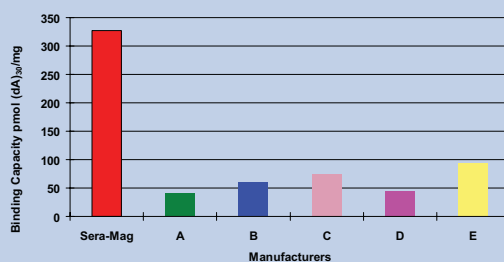
Cross section of Sera-Mag's unique core-shell structure showing high binding outer surface.

Sera-Mag[®] Magnetic Streptavidin Biotin Binding Capacity - Comparisons

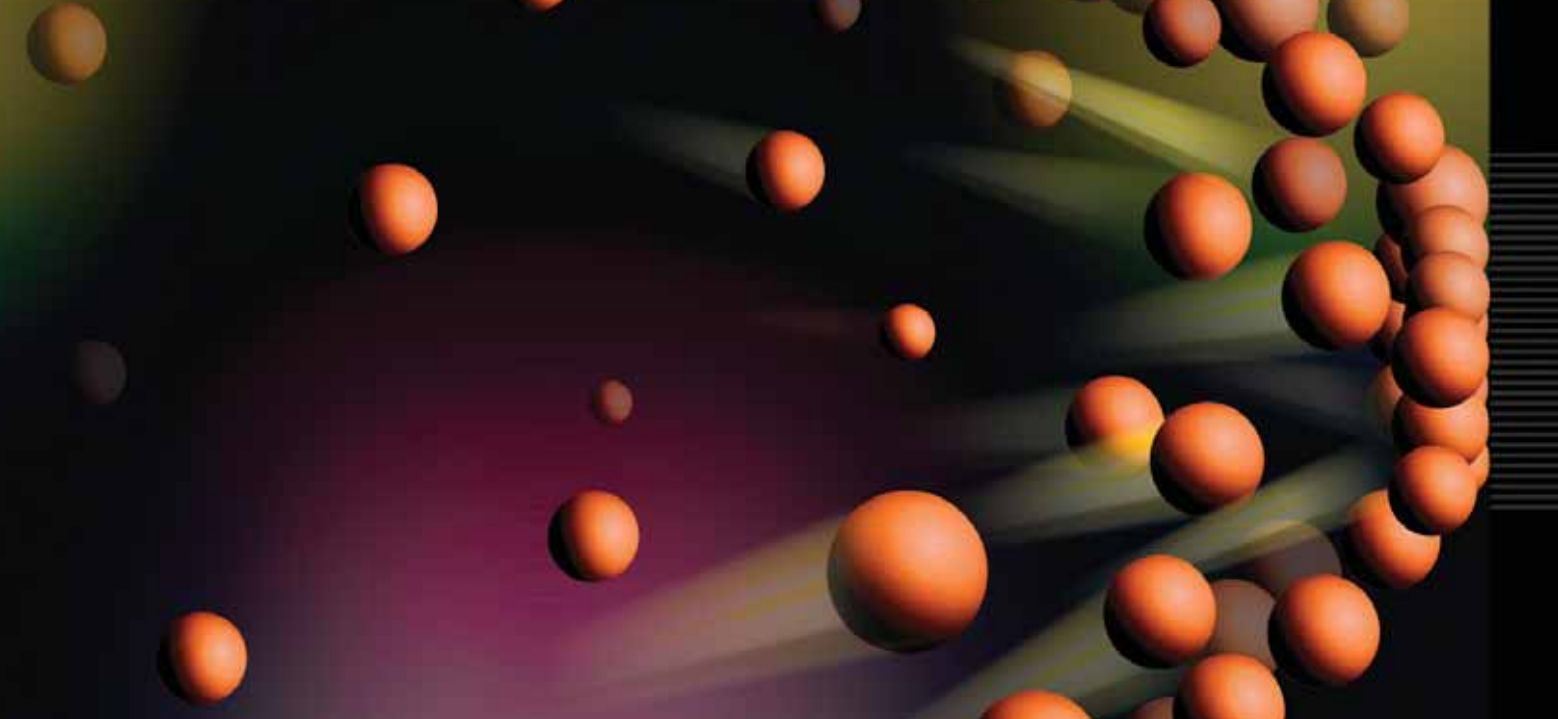


On a weight basis, Sera-Mag has significantly higher biotin-binding capacity than competitors A through G. Higher binding gives better performance at an economical price.

Sera-Mag[®] Magnetic Oligo(dT) (dA)₃₀ Binding Capacity



On a weight basis, Sera-Mag has a significantly higher binding capacity of (dA)₃₀. Higher binding results in a better cost/benefit ratio.



Thermo Scientific Seradyn Sera-Mag SpeedBeads Superior Microparticle Technology

The Sera-Mag SpeedBeads are the newest entry in the Sera-Mag line of magnetic particles. These particles respond twice as fast in a magnetic field as our original Sera-Mag magnetic particles, and are available in carboxylate-modified, NeutrAvidin and Streptavidin coated versions. They are especially useful in clinical immunoassays where speed of magnetic response is important, or for isolation from viscous solutions in molecular biology applications.

All SpeedBeads have improved magnetic response time, but retain the original Sera-Mag properties including:

- Sensitivity
- Stability
- Physical integrity
- Colloidal stability
- Reproducibility
- High binding capacity
- Very slow settling rate in the absence of a magnetic field
- Unaffected in conditions such as sonication, drying, freezing and pH extremes
- Effective in a wide variety of clinical and molecular applications
- Cost effective
- Long shelf-life

SpeedBeads Carboxylate-Modified

- Double speed Sera-Mag base magnetic particle
- Fast magnetic response time for clinical diagnostic assays
- Excellent for a variety of nucleic acid isolation applications

SpeedBeads Streptavidin

- Use in demanding applications that require high binding capacity
- Much quicker isolation from viscous cell lysates
- Universal streptavidin-biotin isolation systems

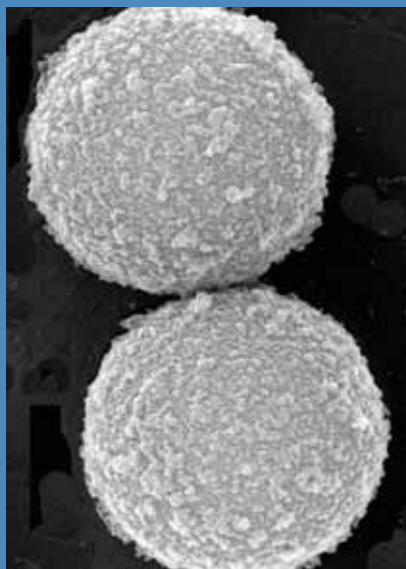
SpeedBeads Streptavidin-Blocked

- Reduced non-specific binding
- Improved performance in demanding applications
- Excellent in affinity isolation applications

SpeedBeads NeutrAvidin

- Broad utility for a variety of high binding capacity needs
- Much quicker isolation from viscous cell lysates
- Potential lower non-specific binding characteristics

Sera-Mag SpeedBeads



One of the newest additions to the Sera-Mag product line are SpeedBeads. These magnetic particles respond twice as fast in a magnetic field as our original Sera-Mag magnetic particles, and are great for clinical and molecular diagnostics.

Sera-Mag Magnetic Particle Standard Products

Magnetic Particles

Magnetic Carboxylate-Modified (MG-CM) Particles (Packaged in 1mL, 5mL, 100mL, 1% solids)

Diameter	Application	Binding Capacity	Catalog #
1 μ M	Hydrophilic	High	2415-2105
1 μ M	Hydrophilic	High	4415-2105

Magnetic Oligo(dT) Particles (MG-OL) (Packaged in 1mL, 5mL, 100mL, 1% solids)

1 μ M	Molecular Applications	High	2815-2103
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Magnetic Streptavidin Particles (MG-SA) (Packaged in 1mL, 5mL, 100mL, 1% solids)

1 μ M	Clinical/Molecular Applications	Low	3015-2103
1 μ M	Clinical/Molecular Applications	Medium	3015-2104
1 μ M	Clinical/Molecular Applications	High	3015-2105
1 μ M	Surface blocked/Low NSB	High	5815-2104

Magnetic SpeedBeads

Magnetic SpeedBeads Carboxylate-Modified (MG-CM) (Packaged in 15 mL, 100 mL, 1000 mL, 5% solids, 50 mg/mL)

Diameter	Application	Binding Capacity	Catalog #
1 μ M	Hydrophilic	High	4515-2105
1 μ M	Hydrophilic	High	6515-2105

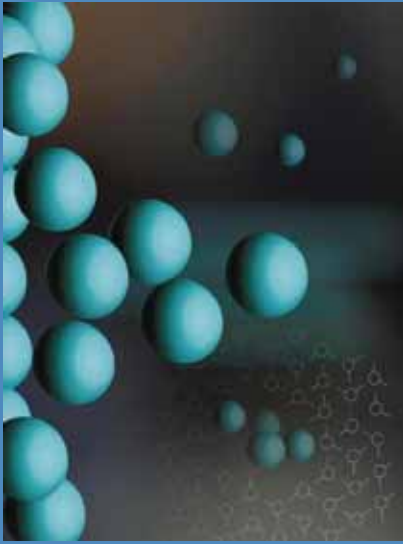
Magnetic SpeedBeads NeutrAvidin (MG-NA) (Packaged in 1 mL, 5 mL, 100 mL, 1% solids, 10 mg/mL)

1 μ M	Clinical/Molecular Applications	High	7815-2104
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Magnetic SpeedBeads Streptavidin (MG-SA) (Packaged in 1 mL, 5 mL, 100 mL, 1% solids, 10 mg/mL)

1 μ M	Surface blocked/Low NSB	High	5915-2104
1 μ M	Clinical/Molecular Applications	High	6615-2104





OptiBind PS and OptiLink CM

Excellent for:

- Turbidimetric tests
- Chemiluminescent tests
- Size standards
- Research studies
- Slide agglutination tests

Benefits

- No washing/pre-cleaning required
- Proprietary formulations do not interfere with protein adsorption
- Simultaneous reaction kinetics
- Tight size distribution - CV <2%
- Improved reaction sensitivity
- Optimized colloidal stability for efficient reactivity and high sensitivity
- Long shelf life (at least 10 years)

When using OptiBind or OptiLink particles, ask about our manual, *Microparticle Reagent Optimization*, which outlines our reagent development strategy. This manual includes validated binding, coupling and microparticle reagent optimization protocols. For detailed technical information, visit our Web site at www.thermo.com/seradyn or ask for our OptiBind Polystyrene and OptiLink Carboxylate-modified technical notes.

Thermo Scientific Seradyn OptiBind Polystyrene (PS)

OptiBind Polystyrene (PS) micro-particles can be used direct from the bottle, without any pre-cleaning, for most applications. Our production does not utilize common surfactants (like SDS, Tween 20, Triton X-100) that can interfere with protein binding to particle surfaces. Our proprietary anionic surfactant does not interfere with the binding of proteins nor cause proteins to desorb from micro-particle surfaces. OptiBind particles are available in a wide range of diameters (from 0.1 μM to 2.5 μM) for a variety of applications.

Polystyrene surfaces are very hydrophobic and adsorb proteins almost instantaneously. OptiBind micro-particles have been optimized for maximum reactivity in many diagnostic applications (see first table on page 11).

Thermo Scientific Seradyn OptiLink Carboxylate-Modified Polystyrene (CM)

OptiLink Carboxylate-Modified Polystyrene (CM) micro-particles contain carboxylic acid groups for covalent coupling and can be used in a variety of applications. The multiple acid contents within the OptiLink product line allow you to control important parameters such as sensitivity, specificity and stability. For most applications, OptiLink micro-particles can be used direct from the bottle without any pre-cleaning. Our proprietary anionic surfactant does not interfere with the binding of proteins nor cause proteins to desorb from micro-particle surfaces. Various surface acid concentrations are available to help optimize your reagent development efforts.

In addition, we have created a series of specially treated, 0.1 to 0.3 μM carboxylate-modified particles designed exclusively for turbidimetric immunoassay applications. These particles have been treated to enhance turbidimetric assay performance.



From clinical immunoassays to molecular biology sample preparation to research applications, Thermo Scientific Seradyn micro-particles are critical components used by many of the world's leading diagnostic and molecular biology companies.

OptiBind and OptiLink Standard Products

OptiBind Polystyrene (PS) (Available in: 15 mL, 100 mL, 1000 mL, 10% solids concentration 100 mg/mL)

Diameter	Catalog #
0.1 µM	8100-0397
0.2 µM	8100-0597
0.3 µM	8100-0797
0.4 µM	8100-0997
0.6 µM	8100-1397
0.8 µM	8100-1797
1.0 µM	8100-2197
1.25 µM	7100-2697
1.8 µM	7100-3397
2.5 µM	7100-3497

(Please specify volume when ordering)

OptiLink Carboxylate-Modified Polystyrene (CM) (Available in: 15 mL, 100 mL, 1000 mL, 10% solids concentration 100 mg/mL)

Diameter	Catalog # (High acid)	Catalog # (Med acid)	Catalog # (Low acid)
0.05 µM	N/A	8300-0350	8300-0370
0.1 µM	N/A	8300-0350	8300-0370
0.2 µM	8300-0520	8300-0550	8300-0570
0.3 µM	8300-0720	8300-0750	8300-0770
0.4 µM	8300-0920	8300-0950	8300-0970
0.8 µM	8300-1720	8300-1750	8300-1770
1.0 µM	8300-2120	N/A	N/A
2.0 µM	7300-3320	N/A	N/A
3.0 µM	7300-3420	N/A	N/A

(Please specify volume when ordering)

Parking Area Information

The surface area per gram of a microparticle varies inversely with the particle diameter. Acid content refers to the titrated milliequivalents per gram (mEq/g) and is weight-based. Parking area combines surface area and acid content to give you the surface acid distribution that is useful for assay optimization. Refer to the chart below.

Acid Content	Parking Area	Properties
Low	60 - 100	Hydrophobic surface, more colloidally stable than plain polystyrene
Medium	35 - 59	Hydrophobic and hydrophilic areas; good colloidal stability and good covalent coupling
High	10 - 34	Hydrophilic surface; excellent colloidal stability; excellent covalent coupling

Thermo Scientific Seradyn Color-Rich Dyed Polystyrene

Color-Rich Particles



Excellent for:

Membrane-based rapid assays

Slide agglutination tests

Hemagglutination assays

Heterogeneous assays

Research applications

OptiBind polystyrene and OptiLink

carboxylate-modified particles (medium acid content) are dyed to create the Color-Rich dyed microparticle product line. Color-Rich dyeing methods provide exceptional color saturation, prevent dye leaching in aqueous media, and leave the surface free for covalent coupling and optimal immunological reactivity. **Color-Rich** has been specifically designed and is most often used for diagnostic lateral-flow rapid assay (membrane-based) applications.

The **Color-Rich** microparticles may be used in a variety of applications such as clinical diagnostics, immuno/histological studies and molecular biology.

Color-Rich

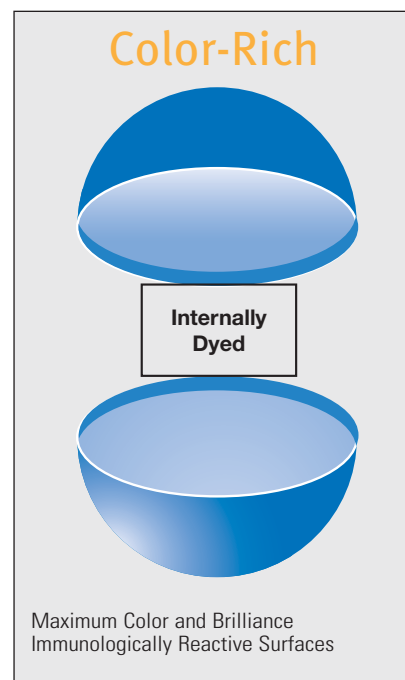
Dyed Polystyrene (Available in: 15 mL, 100 mL, 2.5% solids concentration 25 mg/mL)

Diameter	Color	Catalog #
0.3 μM	Blue	8110-0797
0.8 μM	Blue	8110-1797

Color-Rich

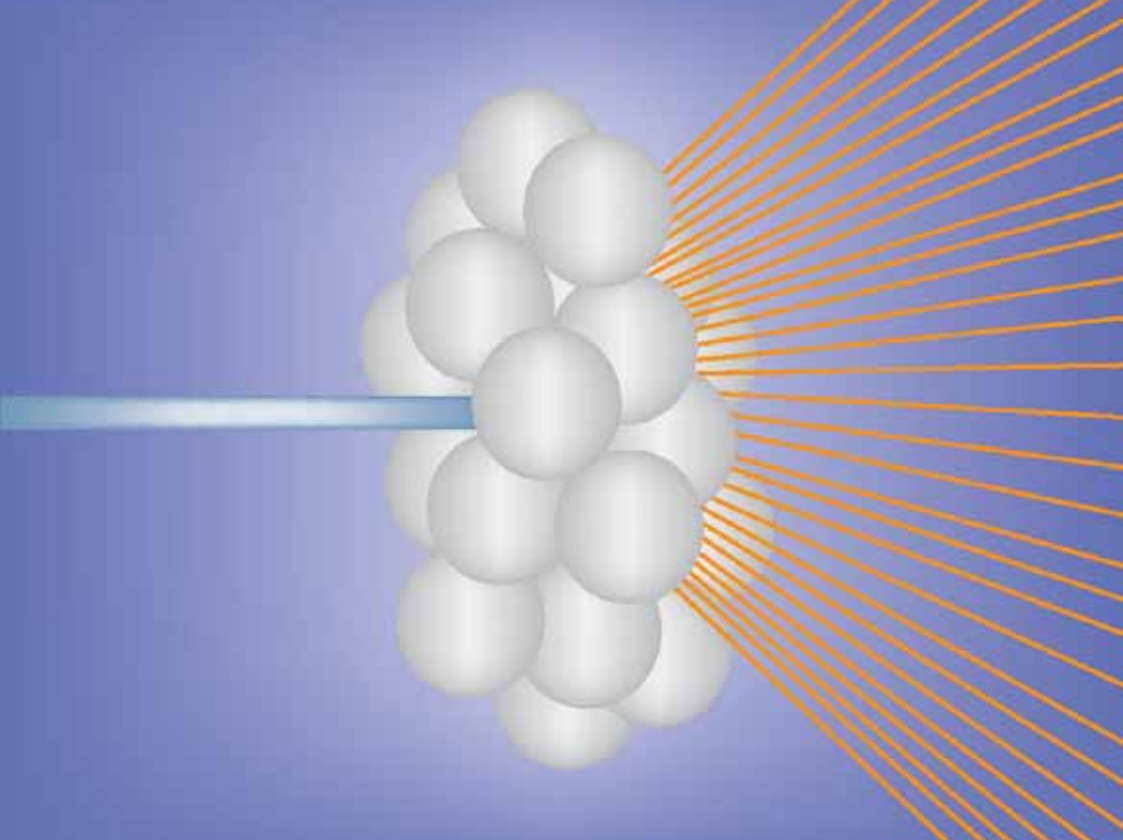
Dyed Carboxylate-Modified (Available in: 15 mL, 100 mL, 2.5% solids concentration 25 mg/mL)

Diameter	Color	Catalog #
0.3 μM	Blue	8310-0750
0.3 μM	Red	8320-0750
0.8 μM	Blue	8310-1750
0.8 μM	Red	8320-1750



Color-Rich Benefits

- Bind ligands without dye interference
- Dye-free surface for coupling
- High protein binding capacity
- Hydrophobic—readily adsorbs proteins
- Optimize assays by controlling sensitivity, specificity and stability
- Optimized acid content
- Fast coupling and processing reactions
- Easy one-step covalent coupling protocols
- Optimized two-step coupling protocols
- Assure reproducibility with our own manufactured microparticles
- GMP manufacturing in our ISO-13485 certified facility



Thermo Scientific Seradyn Fluoro-Max Fluorescent

The Fluoro-Max Fluorescent particles are made by dyeing OptiLink CM particles with europium chelate and are available in standard 0.1 μM , 0.2 μM , and 0.3 μM diameters. They are dyed internally to prevent dye leaching and to assure maximum surface immunoreactivity. These particles have been specifically designed for membrane or automated fluorometric-based applications.

Excitation	Emission
333 nm	613 nm

With an extremely broad Stokes shift, Fluoro-Max europium chelate particles help prevent nonspecific fluorescence interference. Fluoro-Max particles may be used in a variety of applications such as clinical diagnostics, immuno/histological studies and research applications. Fluoro-Max particles are available in both carboxylate-modified and streptavidin coated.

Fluoro-Max Carboxylate-modified (Packaged in 1 mL, 5, mL, 100 mL, 1% solids concentration, 10 mg/mL)

Diameter	Application	Binding Capacity	Catalog #
0.1 μM	Clinical/Molecular Applications	High	9347-0320
0.2 μM	Clinical/Molecular Applications	High	9347-0520
0.3 μM	Clinical/Molecular Applications	High	9347-0720

Fluoro-Max Streptavidin Coated (Packaged in 1 mL, 5, mL, 100 mL, 1% solids concentration, 10 mg/mL)

0.3 μM	Clinical/Molecular Applications	High	2947-0701
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Fluoro-Max Fluorescent Benefits

- Bind ligands without dye interference
- Dye-free surface for coupling
- High protein binding capacity
- Readily adsorbs proteins
- Optimize assays by controlling sensitivity, specificity and stability
- Optimized acid content

Excellent for:

- Quantitative membrane-based rapid assays
- Heterogeneous assays
- Luminescent assays
- Research applications
- Phagocytosis studies
- Cell surface markers
- Pore size determination

Thermo Scientific Seradyn Power-Bind Streptavidin Coated Particles

Power-Bind Streptavidin



Power-Bind Streptavidin particles easily and effectively bind biotinylated ligands.

We covalently coat our OptiLink Carboxylate-Modified Particles with streptavidin. This results in high biotin-binding capacity and long shelf life.

Diameter	Binding Capacity	Catalog #
0.3 μM	~2000 pmol/mg	2900-0701
0.8 μM	~1200 pmol/mg	2900-1701

Streptavidin coated particles (non-magnetic)

We have developed a series of non-magnetic streptavidin coated microparticles (SA-MP) to improve and simplify the binding of ligands to microparticles. Power-Bind SA-MP combine the advantages of high surface area and easy, high affinity, high specific activity binding. They can also be used in a variety of diagnostic and molecular biology applications.

Power-Bind SA-MP are monodisperse particle suspensions with streptavidin covalently bound to the surface (of OptiLink carboxylate-modified particles) in a highly active form. The use of microparticles as a solid phase support in various immunoassays and affinity purifications has been known for some time. Achieving high activity and stable binding of solid phase ligands has been a major difficulty. Biotinylated compounds become stably bound to Power-Bind SA-MP after simple incubation in buffer. This is due to the high affinity of the biotin-streptavidin interaction. SA-MP also functions as a spacer, which improves the specific activity of the bound ligand.

Power-Bind SA-MP addresses the concerns of diagnostic test kit manufacturers and nucleic acid researchers. With well-known biotin-streptavidin reactions, scientists can now easily bind ligands to microparticle surfaces.

Power-Bind Benefits

- Dissociation constant (Kd 10-15 molar)
- Stably bound ligands
- Easy one-step binding protocols for biotinylated ligands
- High activity of surface bound ligands
- Easily solve difficult coupling problems
- Simple aqueous biotinylation reactions
- Low nonspecific interactions (blocked microparticle surface)
- Highly mobile particles for membrane-based applications
- Can be used in EIA formats with biotin/enzyme detection systems
- Beneficial spacer effect of SA molecule
- Choice of 0.3 μM or 0.8 μM diameters for different application requirements
- High biotin-binding capacity for molecular biology applications

Compounds which are difficult to attach to particle surfaces by conventional means may be amenable to biotinylation. This includes compounds for which activation reactions must be performed in organic solvent. In this instance, biotinylation may be carried out in organic solvent; then the biotin derivative is simply mixed with the SA-MP. Nucleic acids, which adsorb poorly to particle surfaces, are readily bound to SA-MP after biotinylation. Also see Flouro-Max Fluorescent Streptavidin Coated particles on page 13.

Ordering Suggestions

When ordering samples or evaluation packs, please specify product volume and catalog numbers. When reordering ("approved") bulk material, please advise us of specific manufacturing lot numbers and volume. Nominal diameters, surface acid content and binding capacities are listed in the product tables. Exact parameters and other technical information is listed on package inserts and certificates of analysis.

Not all microparticles are available at all times. For specific product and lot availability, please email Customer Relations at seradyninfo@thermofisher.com. For outside the USA, please consult our International Distributor list at www.thermo.com/seradyn.

Although we manufacture up to 300 liter batch sizes, please advise us of your microparticle usage requirements so that we can confirm sufficient inventory quantities for your application.

Sample Evaluation Packs

Some of our particle products are sold in economical sample evaluation pack form. These evaluation packs allow you to buy small samples from among our standard inventory of different surfaces, colors, sizes and binding capacities at greatly reduced prices. Please visit www.thermo.com/seradyn or email Customer Relations at seradyninfo@thermofisher.com for more information.

OptiBind sample packs

Polystyrene

Packaged in 15mL at 10% solids. The evaluation pack consists of three lots from all available PS particles.

OptiLink sample packs

Carboxylate-modified

Packaged in 15mL at 10% solids. The evaluation pack consists of three lots from all available CM particles.

Power-Bind sample packs

Streptavidin coated

Packaged in 1mL bottles at 1% solids (10 mg/mL)

Select individual lots to evaluate.

Color-Rich sample packs

Dyed carboxylate-modified and polystyrene

Packaged in 15mL bottles at 2.5% solids (25 mg/mL)

The evaluation pack consists of two samples from all available dyed particles. Diameters include 0.3 μM and 0.8 μM and blue or red particles.

Fluoro-Max Fluorescent sample packs

Fluorescent carboxylate-modified

Packaged in 1mL bottles at 1% solids (10 mg/mL)

The evaluation pack consists of three samples from all available fluorescent particles. Diameters include 0.1 μM , 0.2 μM and 0.3 μM .

Fluorescent streptavidin

Packaged in 1mL bottles at 1% solids (10 mg/mL)

Select individual lots to evaluate.

Sera-Mag sample packs

Magnetic carboxylate-modified and SpeedBeads carboxylate-modified

Packaged in 15mL bottles at 5% solids (50 mg/mL)

The evaluation pack contains 15mL each of our original Sera-Mag carboxyl and SpeedBeads carboxyl particles.

2 x 15mL sample evaluation pack

Magnetic streptavidin

Packaged in 1mL bottles at 1% solids (10 mg/mL). These are available in three different biotin binding capacities (and one additional surface blocked high biotin binding version). The evaluation pack options are three to four samples of low to high biotin-binding capacity particles and the surface blocked version.

3 x 1mL sample evaluation pack

4 x 1mL sample evaluation pack

5 x 1mL sample evaluation pack

Magnetic NeutrAvidin SpeedBeads

Packaged in 1mL bottles at 1% solids (10 mg/mL)

Select individual lots to evaluate

Magnetic streptavidin SpeedBeads

Packaged in 1 mL bottles at 1% solids (10 mg/mL). The two sample evaluation packs contain 1 mL each of:

Sera-Mag SpeedBeads high biotin binding capacity particles (surface unblocked)

Sera-Mag SpeedBeads high biotin binding capacity particles (surface blocked)

2 x 1mL sample evaluation pack

Magnetic oligo(dT)

Packaged in 1mL bottles at 1% solids (10 mg/mL)

Select individual lots to evaluate.

Microparticle Reagent Optimization Manual

Our Microparticle Reagent Optimization manual presents our basic strategy, protocols, tips, and techniques for coupling proteins to microparticles and subsequent diagnostic reagent development.

Included are over 40 figures of data on our model protein system that incorporate our latest findings on the relationships between coupling methods, surface characteristics, function and colloidal stability. The manual takes you through the critical steps for both antigen and antibody coated microparticle reagents.

Microparticle Reagent Optimization	Catalog #
131-Page Manual	0347835

Standard Packaging

Most microparticle products are sold in 15mL, 100mL and 1000mL packages at 10% solids. Dyed, magnetic and other specialty particles are available in different concentrations and package sizes. The particles are routinely supplied with 0.05% sodium azide.

Standard Packaging	% Solids	1 mL	5 mL	15 mL	100 mL	1000 mL	Preservative	Suggested Storage
OptiBind Polystyrene Particles (PS)	10			x	x	x	N/A	2 - 8°C
OptiLink Carboxylate-Modified (CM)	10			x	x	x	N/A	2 - 8°C
Color-Rich Dyed (PS/CM)	2.5			x	x		0.05% Az	2 - 8°C
Sera-Mag Magnetic Carboxyl (MG-CM)	5			x	x	x	0.05% Az	2 - 8°C
Sera-Mag Magnetic Streptavidin (MG-SA)	1	x	x		x		0.05% Az	2 - 8°C
Sera-Mag Magnetic Oligo(dT) (MG-OL)	1	x	x		x		0.05% Az	2 - 8°C
Fluoro-Max Particles (CMEu)	1	x	x		x		0.05% Az	2 - 8°C

Literature

General Literature Information

Microparticles have hundreds of uses in immunoassay development and molecular biology procedures. For optimal use of our microparticles, request the following literature appropriate to your application(s). You may also download these files from our Web site, www.thermo.com/seradyn.

Thermo Scientific Product Information

OptiBind Polystyrene Microparticles
 OptiLink Carboxylate-modified Microparticles
 Color-Rich Dyed Carboxylate-modified Particles
 Fluoro-Max Fluorescent Carboxylate-modified Particles
 Fluoro-Max Fluorescent Streptavidin Coated Particles
 Sera-Mag Magnetic Carboxylate-modified Particles
 Sera-Mag Magnetic Streptavidin Particles
 Sera-Mag Magnetic Oligo(dT) Particles
 Power-Bind Streptavidin Microparticles
 Sera-Mag SpeedBeads

Technical Notes

Microparticle Reagent Optimization Manual
 Recommended Coupling Procedures
 Microparticle-bound Protein Assay
 Filter/Sonicator Information
 Measuring % Solids Turbidimetrically

MSDS Sheets

Polystyrene microparticles
 Carboxylate-modified particles
 Dyed polystyrene and carboxylate-modified particles
 Magnetic carboxylate-modified particles
 Magnetic streptavidin particles
 Non-Magnetic Streptavidin

Technical Support

- Assay optimization assistance
- Troubleshooting
- Technical applications support

Custom Services

- Custom particle synthesis
- Contract manufacturing
- Research and development

Business to Business Support

By partnering with us, we will support your growth through synergistic supply agreements. These will address your specifications, inventory maintenance requirements and delivery schedules. Contact us for details.



Antibodies

Antibody and Antigen Product Menu

World-Class Monoclonal Antibody Technology

We are your “Source and Resource for Antibodies and Antigens.” Since 1984, we have supplied unique, high quality raw materials to leading immunoassay manufacturers. We have worked with many of the leading diagnostic companies—providing bulk monoclonal antibodies. Our vertically integrated, in-house production process – from hybridoma development to purification – results in well-characterized antibodies and antigens that are proven performers in a wide variety of assays.

The monoclonal antibodies are manufactured according to GMP/ISO-13485. Purification is performed by either protein A or ion exchange chromatography. Each lot is tested for purity by either SDS Page, Paragon Gel or HPLC. Large batch sizes can be produced to customer specifications and forecasts. For custom formulations, please contact us at seradyninfo@thermofisher.com or visit our Web site at www.thermo.com/seradyn, or call us at **1-800-428-4072**.

PARTNER WITH US FOR

Monoclonal Antibodies

Our antibodies and antigens exhibit excellent reproducibility, high sensitivity and long-term stability.

Our expertise as an immunoassay manufacturer, in addition to being a raw material supplier, gives us a true understanding of the criteria for high quality immunoassay components—shortening development time and speeding your products to market. Our antibodies and antigens deliver the performance required by top immunoassay manufacturers worldwide.

Our Capabilities

- Ascites
- Cell culture
- Customized batch size
- Manufactured to your specifications

Our Experience

- Proven track record of quality antibody production
- Supplier to leading diagnostic firms worldwide

Our Expertise

- Custom antibody characterization
- Optimize antibodies to your application



Our Antibodies and Antigens Are Proven Performers in a Wide Variety of Assays.

Monoclonal Antibodies

Drugs of Abuse
Enzymes
Fertility
Hormones
Immunoglobulins
Infectious Disease
Serum Proteins
Therapeutic Drugs
Thyroids
Tumor Markers

Recombinant Antigens

rCEA
rCK-MB
rHBsAg
rTSH

Setting the Standard

Our recombinant CK-MB antigen was chosen as the American Association of Clinical Chemistry's exclusive recombinant CK-MB standardization material. This lyophilized recombinant material was developed in conjunction with the AACC's CK-MB subcommittee and is recommended for use as a reference material for standardizing CK-MB mass assays.

Because Quality Is
CRITICAL



ANTIGENS

	Code	Source	Form
CEA	AIC0207	Cell Line	Lyophilized 1mg
	AIC0217	Cell Line	Lyophilized 100µg

	Code	Source	Form
CK-MB	AKC0305 (Calibrator)	Recombinant	Lyophilized 1mg
	AKC0315 (Calibrator)	Recombinant	Lyophilized 100µg
	AKC0325 (Standard)	Recombinant	Lyophilized 100µg

	Code	Source	Form
HBsAg-adw Subtype	ABH0704	Recombinant	PBS Buffer

	Code	Source	Form
HBsAg-ayw Subtype	ABH0705	Recombinant	PBS Buffer

	Code	Source	Form
TSH	ABT0305	Recombinant	Lyophilized 1mg
	ABT0315	Recombinant	Lyophilized 100µg

DRUGS OF ABUSE

	Code	Subclass	Immunogen
Benzoylecgonine	MIB0201	IgG	BE-BSA
	MIB0202	IgG1	BE-KLH
	MIB0205	IgG1	BE-KLH
	MIB0206	IgG3	BE-KLH
	MIB0207	IgM	BE-KLH

	Code	Subclass	Immunogen
Caffeine	MIC0401	IgG2b	Caffeine-3-KLH
	MIC0402	IgG3	Caffeine-3-KLH
	MIC0403	IgG1	Caffeine-3-KLH

	Code	Subclass	Immunogen
Phenobarbitol	MIP0602	IgG1	PB-KLH
	MIP0603	IgG1	PB-KLH
	MIP0604	IgG1	PB-KLH

ENZYMES

	Code	Subclass	Immunogen
Alkaline Phosphatase Calf Intestine (ALP)	MIA1701	IgG1	Calf Intestine ALP
	MIA1702	IgG1	Calf Intestine ALP
	MIA1703	IgG1	Calf Intestine ALP
	MIA1704	IgG1	Calf Intestine ALP
	MIA1705	IgG1	Calf Intestine ALP
	MIA1706	IgG1	Calf Intestine ALP
	MIA1707	IgG1	Calf Intestine ALP

	Code	Subclass	Immunogen
Alkaline Phosphatase Human Placenta (ALP)	MIA1801	IgG2a	Human Placental ALP
	MIA1802	IgG1	Human Placental ALP
	MIA1803	IgG1	Human Placental ALP

	Code	Subclass	Immunogen
Fluorescein Isothiocyanate (FITC)	MIF2901	IgG1	FITC-BSA
	MIF2902	IgG1	FITC-BSA
	MIF2903	IgG2a	FITC-BSA

	Code	Subclass	Immunogen
β-D-Galactosidase (<i>E. coli</i>)	MIG0101	IgG1	<i>E. coli</i> β -D-Galactosidase
	MIG0102	IgG1	<i>E. coli</i> β -D-Galactosidase

	Code	Subclass	Immunogen
Horseradish Peroxidase (HRP)	MIH3101	IgG1	HRP

HORMONES

	Code	Subclass	Immunogen
Cortisol	MIC0201	IgG2b	3-CMO-BSA
	MIC0202	IgG1	3-CMO-BSA

	Code	Subclass	Immunogen
Estradiol	MIE0102	IgG2a	3-CMO-BSA
	MIE0105	IgG1	6-CMO-KLH
	MIE0106	IgG1	6-CMO-KLH
	MIE0107	IgG2a	6-CMO-BSA
	MIE0108	IgG1	6-CMO-KLH
	MIE0109	IgG1	6-CMO-KLH
	MIE0110	IgG1	6-CMO-KLH

	Code	Subclass	Immunogen
Estriol	MIE0301	IgG2a	6-KLH
	MIE0302	IgG2a	6-KLH
	MIE0303	IgG1	3-KLH
	MIE0304	IgG1	3-KLH
	MIE0305	IgG1	3-KLH

	Code	Subclass	Immunogen
Follicle Stimulating Hormone (FSH)	MIF2701	IgG2a	Pituitary FSH
	MIF2702	IgG1	Pituitary FSH
	MIF2706	IgG1	Pituitary FSH
	MIF2709	IgG1	Pituitary FSH
	MIF2710	IgG1	Pituitary FSH
	MIF2711	IgG1	Pituitary FSH
	MIF2712	IgG1	Pituitary FSH
	MIF2713	IgG1	Pituitary FSH
	MIF2714	IgG1	Pituitary FSH
	MIF2716	IgG1	LH
	MIF2717	IgG1	LH

	Code	Subclass	Immunogen
Human Chorionic Gonadotropin (hCG)	MIH9801	IgG1	Urine hCG
	MIH9802	IgG1	Urine hCG
	MIH9803	IgG1	Urine hCG
	MIH9804	IgG1	Urine hCG
	MIH9805	IgG1	Urine hCG
	MIH9806	IgG1	Urine hCG
	MIH9807	IgG1	Urine hCG
	MIH9808	IgG1	Urine hCG
	MIH9809	IgG1	Urine hCG
	MIH9810	IgG1	Urine hCG
	MIH9811	IgG1	Urine hCG

HORMONES

	Code	Subclass	Immunogen
Human Chorionic Gonadotropin (hCG)	MIH9812	IgG1	Urine hCG
	MIH9813	IgG1	Urine hCG
	MIH9815	IgG1	Urine hCG
	MIH9816	IgG1	Urine hCG
	MIH9820	IgG1	Urine hCG
	MIH9821	IgG1	α -Subunit
	MIH9822	IgG1	α -Subunit
	MIH9823	IgG2b	α -Subunit
	MIH9827	IgG1	β -Subunit
	MIH9830	IgG1	β -Subunit
	MIH9832	IgG1	Urine hCG
	MIH9833	IgG1	Urine hCG
	MIH9834	IgG1	Urine hCG
	MIH9835	IgG1	Urine hCG
	MIH9836	IgG1	Urine hCG
	MIH9837	IgG1	Urine hCG
	MIH9838	IgG1	LH

	Code	Subclass	Immunogen
Human Growth Hormone (HGH)	MIH9901	IgG1	Pituitary GH
	MIH9902	IgG1	Pituitary GH

	Code	Subclass	Immunogen
Human Placental Lactase	MIL0501	IgG1	HPL
	MIL0502	IgG1	HPL
	MIL0503	IgG1	HPL
	MIL0504	IgG1	HPL
	MIL0505	IgG1	HPL
	MIL0506	IgG1	HPL

	Code	Subclass	Immunogen
Luteinizing Hormone (LH)	MIL0101	IgG2a	Pituitary LH
	MIL0102	IgG1	Pituitary LH
	MIL0103	IgG1	Pituitary LH
	MIL0104	IgG1	Pituitary LH
	MIL0105	IgG1	Pituitary LH
	MIL0106	IgG1	Pituitary LH
	MIL0107	IgG1	Pituitary LH
	MIL0108	IgG1	Pituitary LH
	MIL0109	IgG1	Pituitary LH
	MIL0110	IgG1	Pituitary LH
	MIL0113	IgG1	Pituitary LH
	MIL0114	IgG1	Pituitary LH
	MIL0115	IgG1	Pituitary LH

HORMONES

	Code	Subclass	Immunogen
Luteinizing Hormone (LH)	MIL0116	IgG1	Pituitary LH
	MIL0117	IgG1	Pituitary LH
	MIL0118	IgG1	Pituitary LH
	MIL0119	IgG1	Pituitary LH
	MIL0120	IgG1	Pituitary LH

	Code	Subclass	Immunogen
Progesterone	MIP0302	IgG	3-CMO-BSA Progesterone
	MIP0303	IgG	3-CMO-BSA Progesterone
	MIP0304	IgG2a	3-CMO-BSA Progesterone
	MIP0305	IgG2a	3-CMO-BSA Progesterone
	MIP0306	IgG	11-BSA Progesterone
	MIP0309	IgG1	19-KLH Progesterone
	MIP0310	IgG1	19-KLH Progesterone
	MIP0311	IgG2a	19-KLH Progesterone

	Code	Subclass	Immunogen
Prolactin	MIP0201	IgG1	Pituitary Prolactin
	MIP0202	IgG1	Pituitary Prolactin
	MIP0203	IgG1	Pituitary Prolactin
	MIP0204	IgG1	Pituitary Prolactin
	MIP0205	IgG2a	Pituitary Prolactin
	MIP0206	IgG2a	Pituitary Prolactin

	Code	Subclass	Immunogen
Testosterone	MIT0101	IgG	3-CMO-BSA Testosterone
	MIT0102	IgG1	3-CMO-BSA Testosterone
	MIT0103	IgG1	3-CMO-BSA Testosterone
	MIT0104	IgG1	3-CMO-BSA Testosterone

	Code	Subclass	Immunogen
Thyroid Stimulating Hormone (TSH)	MIT0401	IgG1	Pituitary TSH
	MIT0402	IgG1	Pituitary TSH
	MIT0403	IgG1	Pituitary TSH
	MIT0404	IgG1	Pituitary TSH
	MIT0405	IgG1	Pituitary TSH
	MIT0406	IgG1	Pituitary TSH
	MIT0407	IgG1	Pituitary TSH
	MIT0408	IgG1	Pituitary TSH
	MIT0409	IgG1	Pituitary TSH
	MIT0410	IgG1	Pituitary TSH
	MIT0411	IgG1	Pituitary TSH

HORMONES

	Code	Subclass	Immunogen
Thyroid Stimulating Hormone (TSH)	MIT0412	IgG1	Pituitary TSH
	MIT0413	IgG1	Pituitary TSH
	MIT0414	IgG1	LH
	MIT0415	IgG1	LH

	Code	Subclass	Immunogen
Thyroxine (T4)	MIT0501	IgG2b	T4-BSA
	MIT0504	IgG1	T4-BSA
	MIT0506	IgG2b	T4-BSA
	MIT0507	IgG1	T4-BSA
	MIT0508	IgG1	T4-KLH
	MIT0509	IgG1	T4-KLH
	MIT0510	IgG1	T4-KLH

	Code	Subclass	Immunogen
Tri-Iodothyronine (T3)	MIT1104	IgG2a	T3-BSA
	MIT1105	IgG1	T3-BSA
	MIT1106	IgG1	T3-BSA
	MIT1107	IgG2a	T3-BSA
	MIT1108	IgG1	T3-BSA
	MIT1109	IgG2a	T3-BSA
	MIT1110	IgG2a	T3-BSA
	MIT1111	IgG1	T3-BSA

INFECTIOUS DISEASE

	Code	Subclass	Immunogen
Hepatitis B Surface Antigen (HBsAg)	MIH9701	IgG1	HBsAg
	MIH9702	IgG1	HBsAg
	MIH9703	IgG1	HBsAg
	MIH9704	IgG1	HBsAg
	MIH9705	IgG1	HBsAg
	MIH9706	IgG2a	HBsAg
	MIH9707	IgG1	HBsAg
	MIH9708	IgG1	HBsAg
	MIH9709	IgG2b	HBsAg
	MIH9710	IgG1	HBsAg
	MIH9711	IgG2b	HBsAg

	Code	Subclass	Immunogen
Strep A	MIS0102	IgG	Group A Strep Carbohydrate

SERUM PROTEINS

	Code	Subclass	Immunogen
Alpha-1-acid Glycoprotein (AAG)	MIA1001	IgG1	Serum AAG
	MIA1002	IgG1	Serum AAG
	MIA1003	IgG1	Serum AAG
	MIA1004	IgG2a	Serum AAG
	MIA1005	IgG2a	Serum AAG
Alpha-1-Antitrypsin (AAT)	MIA1101	IgG2a	Serum AAT
	MIA1102	IgG2b	Serum AAT
	MIA1103	IgG2b	Serum AAT
Alpha-2-Macroglobulin	MIA1201	IgG1	Serum α -2-Macroglobulin
	MIA1202	IgG1	Serum α -2-Macroglobulin
	MIA1203	IgG1	Serum α -2-Macroglobulin
	MIA1204	IgG2b	Serum α -2-Macroglobulin
Apolipoprotein A-I (APO A-I)	MIA1401	IgG2a	APO A-I
	MIA1402	IgG1	APO A-I
	MIA1403	IgG1	APO A-I
	MIA1404	IgG1	APO A-I
	MIA1405	IgG1	APO A-I
	MIA1406	IgG1	APO A-I
	MIA1407	IgG1	APO A-I
	MIA1408	IgG1	APO A-I
	MIA1409	IgG1	APO A-I
Apolipoprotein A-II (Apo A-II)	MIA1501	IgG1	APO A-II
	MIA1502	IgG1	APO A-II
	MIA1503	IgG1	APO A-II
Apolipoprotein B	MIA1601	IgG2a	Serum LDL
	MIA1602	IgG1	Serum LDL
	MIA1603	IgG1	Serum LDL
	MIA1604	IgG2b	Serum LDL
	MIA1605	IgG2b	Serum LDL
	MIA1606	IgG2a	Serum LDL
	MIA1607	IgG2b	Serum LDL
	MIA1608	IgG1	Serum LDL
	MIA1609	IgG1	Serum LDL
	MIA1610	IgG1	Serum LDL
	MIA1611	IgG2a	Serum LDL

SERUM PROTEINS

	Code	Subclass	Immunogen
C-Reactive Protein (CRP)	MIC0501	IgG2a	Serum CRP
	MIC0502	IgG2a	Serum CRP
	MIC0503	IgG3	Serum CRP

	Code	Subclass	Immunogen
Ferritin	MIF2501	IgG2a	Liver Ferritin
	MIF2502	IgG1	Liver Ferritin
	MIF2503	IgG1	Liver Ferritin
	MIF2504	IgG1	Liver Ferritin
	MIF2505	IgG1	Liver Ferritin

	Code	Subclass	Immunogen
Fibronectin	MIF2601	IgG1	Serum Fibronectin
	MIF2602	IgG1	Serum Fibronectin
	MIF2603	IgG1	Serum Fibronectin

	Code	Subclass	Immunogen
Hemoglobin	MIH9505	IgG	Hemoglobin
	MIH9506	IgG	Hemoglobin

	Code	Subclass	Immunogen
Human Serum Albumin (HSA)	MIH3001	IgG1	HSA
	MIH3002	IgG2b	HSA
	MIH3003	IgG2a	HSA
	MIH3004	IgG1	HSA
	MIH3005	IgG1	HSA

	Code	Subclass	Immunogen
Immunoglobulin A (IgA)	MII0101	IgG1	Serum IgA
	MII0102	IgG1	Serum IgA

	Code	Subclass	Immunogen
Immunoglobulin E (IgE)	MII0201	IgG2b	Myeloma IgE
	MII0202	IgG2b	Myeloma IgE
	MII0203	IgG2b	Myeloma IgE
	MII0204	IgG2b	Myeloma IgE

	Code	Subclass	Immunogen
Immunoglobulin G (IgG)	MII0303	IgG2a	Serum IgG
	MII0304	IgG2	Serum IgG
	MII0305	IgG2	Serum IgG
	MII0306	IgG1	Serum IgG

	Code	Subclass	Immunogen
Immunoglobulin M (IgM)	MII0401	IgG1	Serum IgM
	MII0402	IgG1	Serum IgM
	MII0403	IgG1	Serum IgM

	Code	Subclass	Immunogen
Transferrin	MIT0601	IgG	Transferrin
	MIT0602	IgG1	Transferrin
	MIT0603	IgG1	Transferrin

THERAPEUTIC DRUG MONITORING

	Code	Subclass	Immunogen
Digoxin	MID0301	IgG1	Digoxin-BSA
	MID0302	IgG1	Digoxin-BSA
	MID0303	IgG1	Digoxin-BSA
	MID0306	IgG1	Digoxin
	MID0307	IgG1	Digoxigenin-KLH
	MID0308	IgG1	Digoxigenin-KLH
	MID0309	IgG1	Digoxigenin-KLH

	Code	Subclass	Immunogen
Gentamicin	MIG0302	IgG2b	Gentamicin-BSA
	MIG0303	IgG2a	Gentamicin-BSA
	MIG0304	IgG2a	Gentamicin-BSA
	MIG0305	IgG2a	Gentamicin-BSA
	MIG0306	IgG2a	Gentamicin-BSA

	Code	Subclass	Immunogen
Penicillin	MIP0701	IgG1	Penicillin-BSA (Middle Ring)
	MIP0702	IgG2a	Penicillin-BSA (Middle Ring)
	MIP0703	IgG1	Penicillin-BSA (Middle Ring)
	MIP0704	IgG1	Penicillin-BSA (Middle Ring)
	MIP0705	IgG2a	Penicillin-BSA (Middle Ring)

	Code	Subclass	Immunogen
Phenytoin	MIP0802	IgG1	Phenytoin-klh

	Code	Subclass	Immunogen
Theophylline	MIT0301	IgG1	Theophylline-8-BSA
	MIT0302	IgG1	Theophylline-3-BSA
	MIT0303	IgG1	Theophylline-3-BSA
	MIT0304	IgG1	Theophylline-3-BSA
	MIT0305	IgG1	Theophylline-3-KLH
	MIT0306	IgG1	Theophylline-3-KLH
	MIT0307	IgG1	Theophylline-3-KLH

TUMOR MARKERS

	Code	Subclass	Immunogen
Alpha Fetoprotein (AFP)	MIA1301	IgG1	Cord Blood AFP
	MIA1302	IgG1	Cord Blood AFP
	MIA1303	IgG1	Cord Blood AFP
	MIA1304	IgG1	Cord Blood AFP
	MIA1305	IgG1	Cord Blood AFP
	MIA1306	IgG1	Cord Blood AFP
	MIA1307	IgG1	Cord Blood AFP
	MIA1308	IgG1	Cord Blood AFP
	MIA1309	IgG1	Cord Blood AFP

	Code	Subclass	Immunogen
Carcinoembryonic Antigen (CEA)	MIC0101	IgG1	Metastasized Liver Tumor
	MIC0102	IgG1	Metastasized Liver Tumor
	MIC0103	IgG1	Metastasized Liver Tumor
	MIC0104	IgG1	Metastasized Liver Tumor
	MIC0105	IgG1	Metastasized Liver Tumor
	MIC0111	IgG1	Metastasized Liver Tumor
	MIC0112	IgG1	Metastasized Liver Tumor

	Code	Subclass	Immunogen
Prostate Specific Antigen (PSA)	MIP0412	IgG1	Seminal Fluid PSA
	MIP0413	IgG1	Seminal Fluid PSA
	MIP0414	IgG1	Seminal Fluid PSA
	MIP0415	IgG1	Seminal Fluid PSA
	MIP0416	IgG1	Seminal Fluid PSA
	MIP0417	IgG1	Seminal Fluid PSA
	MIP0418	IgG1	Seminal Fluid PSA

	Code	Subclass	Immunogen
Prostatic Acid Phosphatase (PAP)	MIP0101	IgG1	Seminal Fluid Acid Phosphatase
	MIP0102	IgG2a	Seminal Fluid Acid Phosphatase
	MIP0103	IgG1	Seminal Fluid Acid Phosphatase
	MIP0104	IgG1	Seminal Fluid Acid Phosphatase
	MIP0105	IgG1	Seminal Fluid Acid Phosphatase

MSDS

Material Safety Data Sheets are available for all Thermo Scientific Seradyn products. Please contact our Customer Relations Department if you need more information.

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Our contact numbers are:

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Fax: **317-610-3888**

Email: seradyninfo@thermofisher.com

Web site: www.thermo.com/seradyn

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- Quote Number
- Order Number
- Catalog Number
- Quantity
- Shipping Requirements. If you have special requirements for shipping, please indicate this clearly in your order

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