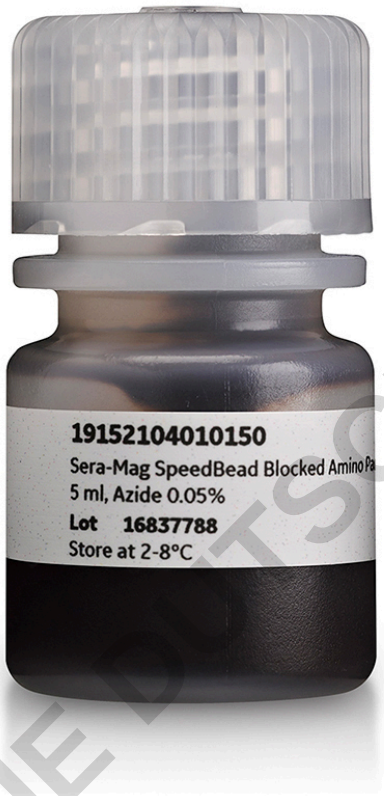


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Sera-Mag™ SpeedBeads Amine-Blocked Particles

Sera-Mag SpeedBeads Amine Blocked Magnetic Particles are uniform, colloidally stable, mono-dispersed, non-porous super-paramagnetic spheres made by a proprietary core-shell method. The core is a carboxylate-modified particle made by free radical emulsion polymerization of styrene and acid monomer. Magnetite (Fe3O4) is coated onto this core particle and then encapsulated with propriety polymers. The final surface is blocked using a proprietary method to help prevent nonspecific binding of proteins.

Sera-Mag SpeedBeads Amine-Blocked Particles combine fast magnetic reaction kinetics and high binding capacity due to large surface area.

Overview

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by free radical emulsion polymerization of styrene and acid monomer. Magnetite (Fe_3O_4) is coated onto this core particle and then encapsulated with propriety polymers. The final surface is blocked using a proprietary method to help prevent nonspecific binding of proteins.

Sera-Mag SpeedBeads Amine-Blocked Particles combine fast magnetic reaction kinetics and high binding capacity due to large surface area.

- Feature a non-surfactant, non-protein blocked surface to reduce the undesired adsorption of proteins from a sample matrix.
- Fast reaction kinetics increases throughput and precision, also enabling faster movement through viscous solutions.
- Unique cauliflower-like surface provides increased area for binding reactions compared to smooth surface particles.
- Uniform, nominal 1 µm diameter provides excellent lot-to-lot reproducibility.

Find out which magnetic bead chemistry meets your application requirements in Magbeads 101: A guide to choosing and using magnetic beads and explore ways to optimize your magnetic bead workflow in Scientists guide to magnetic beads

Sera-Mag and SpeedBead technology

The core of each particle is made by a free radical emulsion polymerization of styrene and acid monomer. One (Sera-Mag) or two (Sera-Mag SpeedBeads) layers of magnetite are then coated onto this core, while the surface is modified to minimize non-specific binding of proteins. Due to the extra magnetite layer, SpeedBeads respond twice as fast to a magnetic field as the original Sera-Mag particles.

Customized for your workflows Magnetic particles may need further processing before they are ready to use for your particular application. Therefore, we can provide personalized magnetic bead solutions that fit seamlessly into your workflows, often saving you time and money in the process. We aim to provide product that is ready to use with little or no need for further modification. This allows you to focus on the science that matters. To learn more, please visit our custom manufacturing services page.

The core of the particle is made from free radical emulsion polymerization of styrene and acid monomers. This, combined with the two layers of magnetite that coat the core, cause Sera-Mag SpeedBeads to respond twice as fast. The surface of the particle is then blocked with a non-surfactant, non-protein based method, helping to prevent non-specific binding of proteins.

Typical molecular biology applications include: nucleic acid isolation, next generation sequencing (NGS) and clinical diagnostic immunoassays.

Have you considered your magnetic separation rack?

Cytiva's Magnetic Separation Rack 15 mL is a 3D printed, magnetized tube rack with a strong, removable magnetic force and easy pipette access. It facilitates high capture, retention, and release of magnetic beads from various liquid sample media, allowing high-throughput, parallel processing of up to six 15 mL samples.

Find out more about magnetic separation racks

Check out Cytiva Diagnostic Services, helping you build and accelerate the development of smarter molecular and immunodiagnostic assays.

Our ISO 13485 accredited manufacturing center of excellence adheres to the standards in the manufacturing process, ensuring the highest quality and compliance with international medical device regulations.

Product specifications
Sera-Mag SpeedBeads Amine-Blocked Particles, 5 ml

Catalog code	19152104010150
Average Particle Size	1 µm
Bead type	Sera-Mag Magnetic Beads
Concentration	10mg/ml
Ligand	Amine

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Magnetite Content	~60%
Storage conditions	4 °C

Sera-Mag SpeedBeads Amine-Blocked Particles, 100 ml

Catalog code	19152104010350
Average Particle Size	1 µm
Bead type	Sera-Mag Magnetic Beads
Concentration	10mg/ml
Ligand	Amine
Magnetite Content	~60%
Storage conditions	4 °C

Sera-Mag SpeedBeads Amine-Blocked Particles, 1 ml

Catalog code	19152104011150
Average Particle Size	1 µm
Bead type	Sera-Mag Magnetic Beads
Concentration	10mg/ml
Ligand	Amine
Magnetite Content	~60%
Storage conditions	4 °C

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