

SPHERO™ Silica Microparticles

Flexible solid phase for cell separation & expansion, proteomics, nucleic acid isolation and IVD assay development.

Silica Nano and Microspheres

- Higher density (1.96g/mL) which allows centrifugation when working with nanometer sized particles
- Maintains shape and size when exposed to aqueous or nonaqueous evironments
- Low autofluorescence and low nonspecific binding of many biomolecules.

Amino Functionalized Silica Microspheres

- Contains primary amines for covalent coupling with electrophilic groups
- React with a number of functional groups such as succinimidyl NHS ester, COOH and many other groups.

Superparamagnetic Silica Nanospheres

- Sizes of ~200 nm and 500 nm
- Available with silanol groups to form stable siloxane linkages
- Used to purify DNA or RNA under high concentration of chaotropic salts.

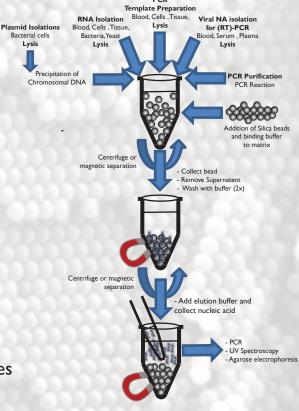


Figure I: Silica Beads for DNA Purification Principle

To learn more about Spherotech Silica Particles visit us online

www.spherotech.com



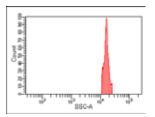
SPHERO™ Silica Particles

SPHERO™ Silica Particles

- Excellent tool for consistent isolation of nucleic acids
- Available in bulk quantities on an OEM basis
- Flexible silanization chemistries
- Unique refractive index and density
- Low autofluorescence and low nonspecific binding of many biomolecules
- Suitable for applications over 1000°C
- Wide range of solvent compatibility

SPHERO™ Silica Nano Superparamagnetic Particles

- Encapsulated silica layer eliminates exposed iron oxide on the surface
- Ensure rapid magnetic mobility and efficient isolation of nucleic acids
- Low sedimentation rate and optimal reaction kinetics due to small diameter making them favorable for automated assays.



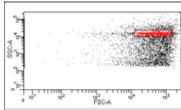


Figure 2. BD Fortessa X-20 flow cytometer histogram of Cat. No. SIM-025-10H

SPHERO™ Silica Particles

Particle Type and Surface	Size, µm	% w/v	Catalog No.	Unit
Silica	0.4-0.6	5.0	SIP-05-10	I0 mL
Silica	1.0-1.4	5.0	SIP-10-10	I0 mL
Silica	1.5-1.9	5.0	SIP-15-10	I0 mL
Silica	3.0-3.4	5.0	SIP-30-10	I0 mL
Silica	6.0-8.0	5.0	SIP-60-10	I0 mL

SPHERO™ Streptavidin Silica Particles

Particle Type and Surface	Size, µm	% w/v	Catalog No.	Unit
Streptavidin Silica	0.4-0.6	1.0	SVSIP-05-5	5 mL
Streptavidin Silica	1.0-1.4	1.0	SVSIP-10-5	5 mL
Streptavidin Silica	1.5-1.9	1.0	SVSIP-15-5	5 mL
Streptavidin Silica	3.0-3.4	1.0	SVSIP-30-5	5 mL
Streptavidin Silica	6.0-8.0	1.0	SVSIP-60-5	5 mL

SPHERO™ Amino Silica Particles

Particle Type and Surface	Size, µm	% w/v	Catalog No.	Unit
Amino Silica	0.4-0.6	5.0	ASIP-05-10	I0 mL
Amino Silica	1.0-1.4	5.0	ASIP-10-10	I0 mL
Amino Silica	1.5-1.9	5.0	ASIP-15-10	I0 mL
Amino Silica	3.0-3.4	5.0	ASIP-30-10	I0 mL
Amino Silica	6.0-8.0	5.0	ASIP-60-10	10 mL

SPHERO™ Silica Superparamagnetic

Particle Type and Surface	Size, µm	% w/v	Catalog No.	Unit
Silica Superparamagnetic	0.1-0.39	2.5	SIM-025-10H	I0 mL
Silica Superoaramagnetic	0.4-0.69	2.5	SIM-05-10H	I0 mL
Amino Silica Superparamagnetic	0.1-0.39	2.5	ASIM-025-10H	I0 mL
Amino Silica Superparamagnetic	0.4-0.69	2.5	ASIM-05-10H	I0 mL

SPHERO™ Custom Coated Silica Particles

Spherotech can prepare custom coated silica micro and nanospheres for a variety of industrial and research applications. Our custom coating service is efficient and confidential, and we guarantee the quality of our work.

<u>Protein</u> <u>Antibody</u>

Avidin
Streptavidin
Biotin
Protein A
Protein G
Goat anti-Rabbit
Goat anti-Mouse
Donkey anti-Goat
Sheep anti-Rat

Quality protein or ligand custom coatings of silica beads for every research need