

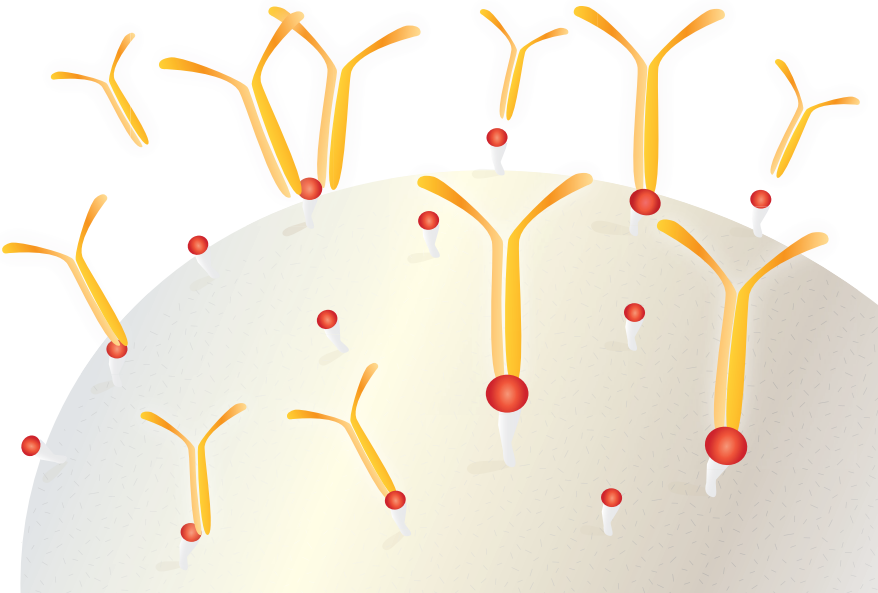
POLYMER MICROSPHERES

Proteins A and G

Protein A and Protein G readily bind the Fc regions of many IgG isotypes. For this reason, they are used extensively for affinity purification of antibodies from serum or cell culture supernatant, and for capture of immunoprecipitated protein complexes. When Protein A and Protein G microspheres are used as reagents in tests and assays, the immobilized antibodies may be crosslinked to the coated support for long-term stability. You can find our magnetic Protein A and G products on pages 38, 43, and our flow cytometry Protein A & G beads on page 80. See also TN101 and PDS 722 for more information.

Catalog Number	Description	Nominal Diameter	Specification Range
CP02000	Protein A Polymer	1.00µm	0.95 - 1.05µm
CP02001	Protein A Polymer	5.00µm	4.80 - 5.20µm
CP02002	Protein A Polymer	10.00µm	9.50 - 10.50µm

Protein A polystyrene comes in units of 1mL, 2mL, 5mL or 10mL. (~1% solids 10mg/mL) Please see BangsLabs.com for pricing or contact a local agent.



Host Species	Antibody Class	Protein A Affinity Strength	Protein G Affinity Strength
Mouse	Total IgG	Strong	Strong
	IgG ₁	Weak	Medium
	IgG _{2a}	Strong	Strong
	IgG _{2b}	Strong	Strong
Rat	Total IgG	Weak	Medium
	IgG ₁	Weak	Medium
	IgG _{2a}	No Binding	Strong
	IgG _{2b}	No Binding	Weak
	IgG _{2c}	Strong	Strong
Human	Total IgG	Strong	Strong
	IgG ₁	Strong	Strong
	IgG ₂	Strong	Strong
	IgG ₃	Weak	Strong
	IgG ₄	Strong	Strong
Goat	Total IgG	Weak	Strong
	IgG ₁	Weak	Strong
	IgG ₂	Strong	Strong
Rabbit	Total IgG	Strong	Strong
Hamster	Total IgG	Weak	Medium
Sheep	Total IgG	Weak	Strong
	IgG ₁	Weak	Strong
	IgG ₂	Strong	Strong
Guinea Pig	Total IgG	Strong	Weak
Donkey	Total IgG	Medium	Strong

Additional Products

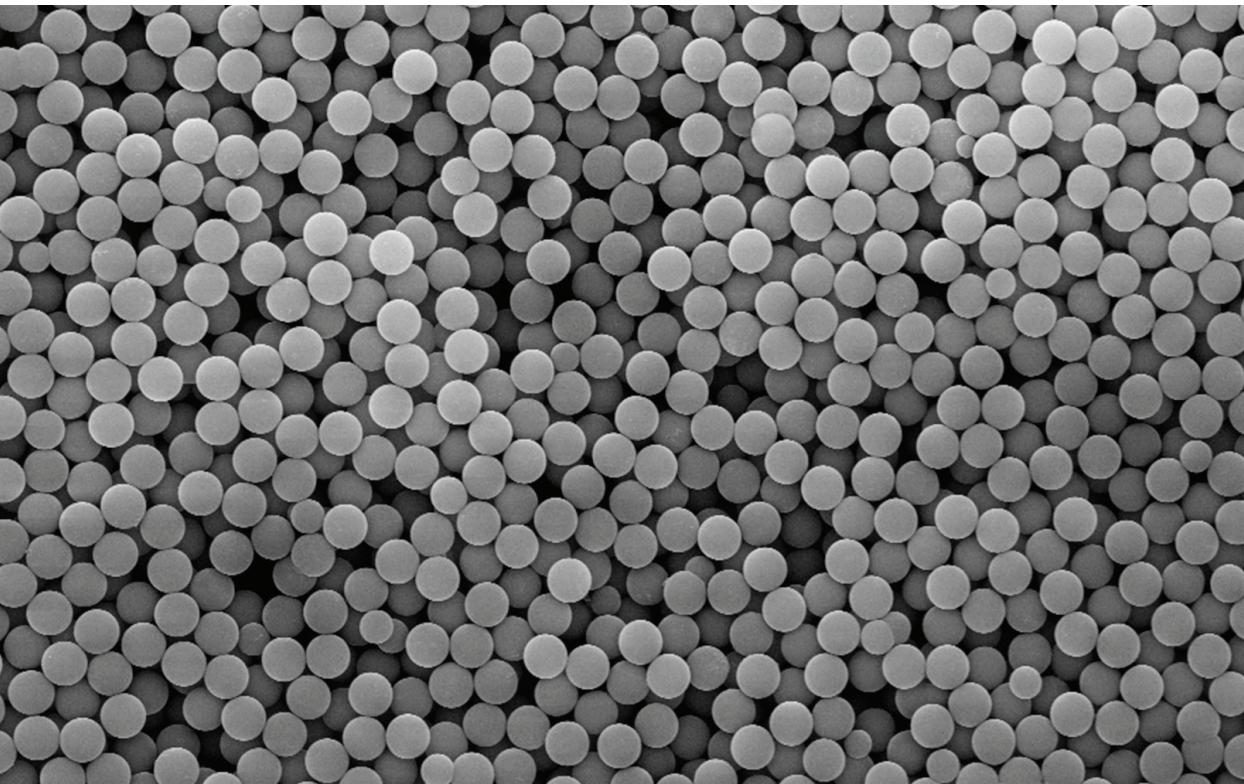
Our line of BioMag® superparamagnetic particles includes many affinity coatings, such as streptavidin, biotin, Protein A, Protein G, oligo dT, wheat germ agglutinin (WGA), Concanavalin A (Con A), and a range of secondary antibodies (pages 42 - 45).

SILICA MICROSPHERES

Inorganic supports such as silica microspheres have become increasingly important for a variety of applications, including isolation of nucleic acids, cell separation, and immuno- and DNA-based assays. The unique properties of a silica substrate offer benefits such as flexible silanization chemistries, unique refractive index and density, low autofluorescence, low nonspecific binding of proteins, hydrophilicity & ease of handling.

Silica Properties	
Surface Functionalities	SiOH (plain), COOH, NH ₂ , SA, Bind-IT
Refractive Index (589nm)	~1.43 – 1.46
Density (g/cm ³)	~2.0
Glass Transition Temperature (°C)*	>>1000

** Reported value for bulk silica.*



Plain Silica

SiO₂ with natural hydroxyl or silanol (SiOH) surface groups that are available for silanization. See TN104 and PDS 702.

Catalog Number	Nominal Diameter	Specification Range
SS02000	0.150µm	0.120 - 0.180µm
SS02001	0.300µm	0.260 - 0.340µm
SS02002	0.400µm	0.360 - 0.440µm
SS03000	0.500µm	0.460 - 0.540µm
SS03001	0.700µm	0.660 - 0.740µm
SS03002	0.900µm	0.860 - 0.940µm
SS04000	1.00µm	0.95 - 1.05µm
SS04001	1.50µm	1.40 - 1.60µm
SS04002	2.00µm	1.80 - 2.20µm
SS05000	2.50µm	2.30 - 2.70µm
SS05001	3.00µm	2.80 - 3.20µm
SS05002	4.00µm	3.80 - 4.20µm
SS05003	5.00µm	4.80 - 5.20µm
SS06000	>5.00µm	>5.00µm

Plain silica comes in weights of 0.5, 1.0, 1.5, or 5.0 grams. (~10% solids 100 mg/mL) Please see BangsLabs.com for pricing or contact a local agent.

Plain Silica in Dry Form

SiO₂ with natural hydroxyl or silanol (SiOH) surface groups that are available for silanization. See TN104 and PDS 702.

Catalog Number	Nominal Diameter	Specification Range
SSD2001	0.300µm	0.260 - 0.340µm
SSD3000	0.500µm	0.460 - 0.540µm
SSD4000	1.00µm	0.95 - 1.05µm
SSD4001	1.50µm	1.40 - 1.60µm
SSD5000	2.50µm	2.30 - 2.70µm
SSD5001	3.00µm	2.80 - 3.20µm
SSD5002	4.00µm	3.80 - 4.20µm
SSD5003	5.00µm	4.80 - 5.20µm

Plain dry silica comes in weights of 0.5, 1.0, 1.5, or 5.0 grams. Please see BangsLabs.com for pricing or contact a local agent.

