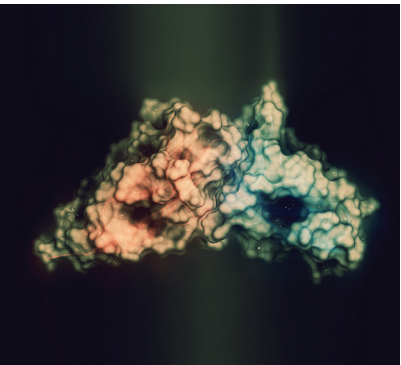


MAGNETIC MICROSPHERES & PARTICLES

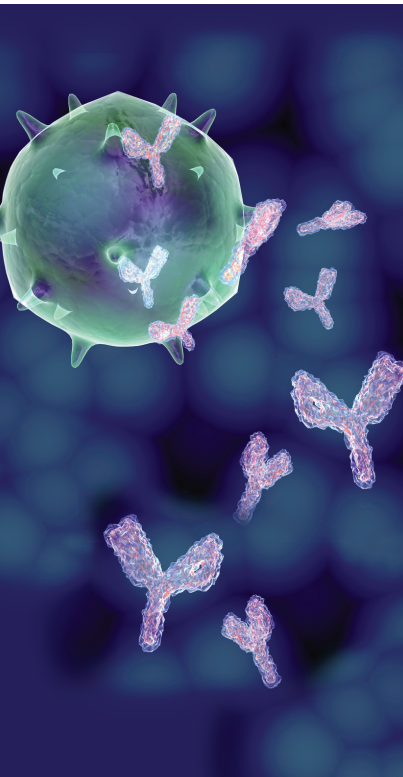


BioMag® Lectin

Lectins including Concanavalin A and Wheat Germ Agglutinin have specific sugar binding partners that can be exploited for the immobilization of saccharides, which commonly lack functional groups needed for covalent binding. See PDS 716 and PDS 720.

Catalog Number	Description	Concentration	Unit size
BP531	BioMag Plus Concanavalin A	5 mg/mL	3mL or 10mL
BP530	BioMag Plus Wheat Germ Agglutinin	5 mg/mL	3mL or 10mL

Please see BangsLabs.com for pricing or contact a local agent.



BioMag® Secondary Antibody

BioMag secondary antibody particles are used extensively in the capture of immune complexes for immunoprecipitation and antibody-labeled cells for indirect cell separation. Secondary antibody coatings also afford a convenient method for binding specific primary antibodies to BioMag particles. See website for specific product data sheets.

Catalog Number	Description	Concentration	Unit size
BM563	BioMag anti-Human IgG	1 mg/mL	50mL
BM562	BioMag anti-Human IgG (Fc)	5 mg/mL	50mL
BM561	BioMag anti-Human IgM	1 mg/mL	50mL
BM549	BioMag anti-Mouse IgG	1 mg/mL	50mL or 500mL
BM550	BioMag anti-Mouse IgG (Fc)	5 mg/mL	50mL or 500mL
BP619	BioMag Plus anti-Mouse IgG	1 mg/mL	50mL
BP612	BioMag Plus anti-Mouse IgG Antibody Coupling Kit*	1 mg/mL	25mL
BM558	BioMag anti-Mouse IgM	1 mg/mL	50mL or 500mL
BM559	BioMag anti-Rabbit IgG	1 mg/mL	50mL or 500mL
BM560	BioMag anti-Rat IgG	1 mg/mL	50mL or 500mL
BM548	BioMag anti-Rat IgG (Fc)	5 mg/mL	50mL or 500mL
BM557	BioMag anti-Rat IgM	5 mg/mL	50mL or 500mL

* Kit is provided with a magnetic separator. Please see BangsLabs.com for pricing or contact a local agent.

BioMag® Dextran-Coated Charcoal

BioMag Dextran-coated Charcoal is suitable for the adsorption of free tritium-labeled analyte in typical competitive radioimmunoassays. BioMag particles are coated with NORIT® activated carbon and dextran. See PDS 555.

Catalog Number	Description	Concentration	Unit size
BM555	BioMag Dextran-coated Charcoal	5 mg/mL	100mL
BP530	BioMag Dextran-coated Charcoal Concentrate	50 mg/mL	1000mL

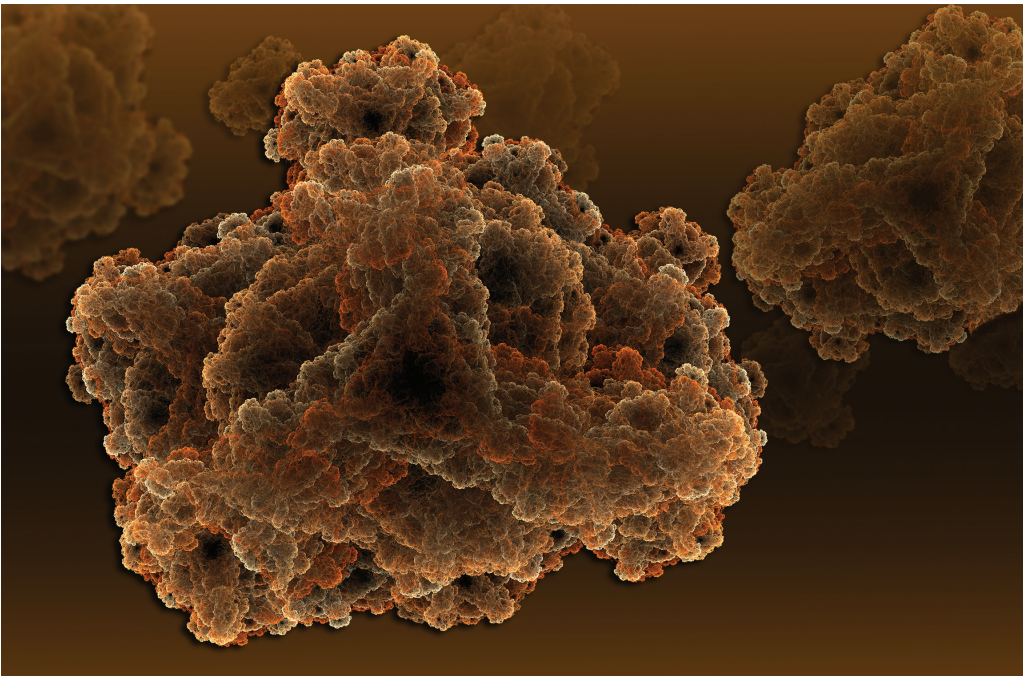
Please see BangsLabs.com for pricing or contact a local agent.

BioMag® Superparamagnetic Iron Oxide

BioMag Superparamagnetic Iron Oxide may be used for applications in which a plain iron oxide particle is required. Particles are ~10µm in size, and are non-functionalized. See PDS 547.

Catalog Number	Description	Concentration	Unit size
BM547	BioMag Superparamagnetic Iron Oxide	50 mg/mL	10mL

Please see BangsLabs.com for pricing or contact a local agent.



ACCESSORY REAGENTS & COMPANION PRODUCTS


Whether you’re just getting started, or are an established laboratory seeking convenience, we have assembled a collection of useful accessory products and implements to assist with your microparticle reagent development and handling efforts. Our offerings include common crosslinking reagents, surfactants, and solutions / buffers for microsphere coating and storage. Our magnetic particle separators and ultrafiltration devices support microparticle washing protocols (see TN 203), while our laboratory rotisserie offers a gentle mixing method for suspension preparation and coating protocol incubations. These products complement our extensive catalog of polymer, silica, and magnetic microparticles, and we hope you find them to be helpful.

COUPLING KITS


Our coupling kits permit the covalent immobilization of proteins to microparticles. We offer several kits featuring BioMag® superparamagnetic particles and separations, as well as PolyLink, which may be used with carboxylated polymer or silica microspheres of your choosing. See associated PDS’ for protocols and full kits details. See TN205, Covalent Coupling.

PolyLink Protein Coupling Kit


Our PolyLink Protein Coupling Kit is ideal for investigators who are new to microsphere coating, or simply desire the convenience of a kit. The kit is intended for use with carboxyl-functionalized microspheres of 1µm or larger. It contains sufficient EDAC, coupling buffer, and wash / storage buffer for 50 reactions using ~200 – 500µg protein and 12.5mg COOH-functionalized microspheres per reaction. The protocol may be adapted for smaller or larger diameter spheres and our Vivaspin® ultrafiltration devices may be used for wash steps with submicron spheres. See PDS 644.




Add COOH
Microspheres




Wash
Microspheres




15 min
EDAC Activation



Add protein
30-60 min incubation



Wash
Microspheres



Protein Coated
Microspheres

Catalog Number	Description	# of Reactions
PL01N	PolyLink Protein Coupling Kit*	50 x 12.5mg microspheres*

* Microspheres and protein are not included in the kit. Please see BangsLabs.com for pricing or contact a local agent.

BioMag® Magnetic Immobilization Kit

The BioMag Magnetic Immobilization Kit is designed to introduce the user to particle coating using BioMag Amine particles and glutaraldehyde. The kit contains sufficient reagents for 1 x 10mL coupling reaction. See PDS 546.

Catalog Number	Description	Concentration	Unit size
BM545	BioMag Amine Magnetic Immobilization Kit*	50 mg/mL	10mL (1 reaction x10mL)

* Kit is provided with a magnetic separator. Please see BangsLabs.com for pricing or contact a local agent.

BioMag®Plus Protein Coupling Kits

The BioMag Plus Protein Coupling Kits are intended for the covalent coupling of proteins to BioMag Plus superparamagnetic particles. The Protein Coupling Kits feature either BioMag Plus Amine or BioMag Plus Carboxyl particles, a chemical crosslinker (glutaraldehyde or EDAC), conical centrifuge tubes, two wash buffers, the quenching solution, and a BioMag MultiSep Magnetic Separator. See PDS 617 and 618.

Catalog Number	Description	Concentration	Unit size
BP610	BioMag Plus Amine Protein Coupling Kit*	50 mg/mL	10mL (5 reactions x 2mL)
BP611	BioMag Plus Carboxyl Protein Coupling Kit*	20 mg/mL	2.5mL (5 reactions x 0.5mL)

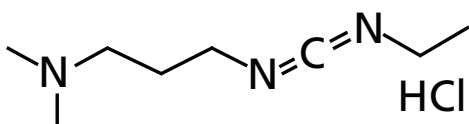
* Kit is provided with a magnetic separator. Please see BangsLabs.com for pricing or contact a local agent.



ACCESSORY REAGENTS & COMPANION PRODUCTS

COUPLING REAGENTS

Our crosslinking reagents for microsphere coating offer a convenient means to replenish individual components of coupling kits. See PDS 740.

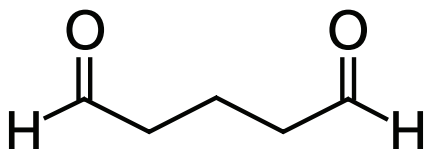


DEPC-Carbodiimide (EDAC)

EDAC is a zero-length crosslinker that is routinely used for the covalent binding of amine-containing ligands to carboxylated microspheres. Sample protocols are provided in TN 205, Covalent Coupling, 302, Molecular Biology, and PolyLink PDS 644.

Catalog Number	Description	Unit size
AA010	DEPC-Carbodiimide (EDAC)	1g or 5g

Please see BangsLabs.com for pricing or contact a local agent.



Glutaraldehyde, EM Grade, 25%

Glutaraldehyde is a homobifunctional linker that is suitable for binding amine-containing ligands to amine-modified beads. We supply EM (electron microscopy) grade glutaraldehyde in ampoules to ensure highest activity. Each vial is fitted with an ampoule cracker for added safety.

Catalog Number	Description	Unit size
AA012	Glutaraldehyde, EM Grade, 25%	10 x 10 mL (ampoules)

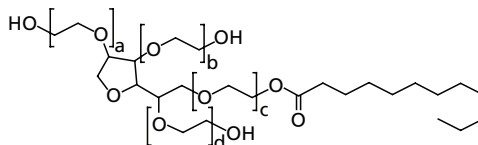
Please see BangsLabs.com for pricing or contact a local agent.

SURFACTANTS

Surfactants are commonly utilized with microspheres composed of hydrophobic polymer matrices such as polystyrene to facilitate bead wetting and deter or treat aggregation. Common concentrations are ~0.1% for uncoated polymer beads, and ~0.01 - 0.05% in the storage buffer of coated polymer, magnetic, and silica beads. The type and concentration of surfactant should be optimized to achieve best performance. As surfactant associates with the bead surface, it is washed out prior to bead coating or use of the coated microsphere reagent to avoid interference with binding reactions. See PDS 739.

Tween® 20 Nonionic Surfactant

Tween® 20 is a nonionic surfactant. It is often used in the storage buffers of coated bead suspensions (~0.01 - 0.05%). Very low concentrations may be used in wash or binding buffers if needed (e.g. 0.0005%).

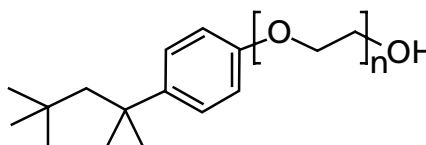


Catalog Number	Description	Unit size
AA016	Tween® 20	10g

Please see BangsLabs.com for pricing or contact a local agent.

Triton™ X-100 Nonionic Surfactant

Triton™ X-100 is a nonionic surfactant. It is often used in the storage buffers of coated bead suspensions (~0.01 - 0.05%). Very low concentrations may be used in wash or binding buffers if needed (e.g. 0.0005%).

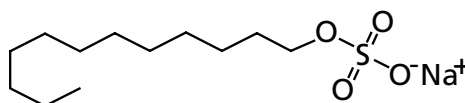


Catalog Number	Description	Unit size
AA014	Triton™ X-100	10g

Please see BangsLabs.com for pricing or contact a local agent.

Sodium Dodecyl Sulfate (SDS) Anionic Surfactant

Sodium dodecyl sulfate (SDS) is an anionic surfactant, which will decrease polymer bead hydrophobicity and can additionally participate in charge stabilization of the suspension. SDS is a more rigorous surfactant that is commonly used in uncoated polymer bead preparations. (~0.1%)



Catalog Number	Description	Unit size
AA018	SDS	10g

Please see BangsLabs.com for pricing or contact a local agent.