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B E A D S ● A B O V E T H E R E S T™

Description

Superparamagnetic particles have been utilized extensively in diagnostics and other research applications for the capture of biomolecules and cells. They confer a number of benefits, including ease of separation and suitability for automation. When coated with recognition molecules, magnetic microspheres are useful for the capture and separation of target. Unwanted sample constituents may be washed away following a simple magnetic separation step. Highly efficient magnetic separation eliminates potential interfering molecules, allowing sensitive detection of target.

COMPEL microspheres are highly uniform superparamagnetic microspheres, ideal for applications that demand uniform bead response, such as miniaturized bioassays and separations. Composed of magnetite dispersed in a polymer matrix, COMPEL particles are overcoated with functional polymer for the encapsulation of magnetite and introduction of reactive groups. The result is a highly-functionalized bead with a density close to that of other non-magnetic, polymeric beads. COMPEL magnetic particles respond rapidly and efficiently to an applied magnetic field, although they will not settle as rapidly as traditional, heavy magnetic particles. COMPEL are offered in diameters of approximately 3µm, 6µm, and 8µm with measured CVs of ≤5%. The polymer matrix is conducive to dyeing, and standard red and green fluorescent versions are available.

Characteristics

Composition:	Polymer
Mean Diameter:	~3µm, 6µm, and 8µm
Surface Groups:	COOH, Streptavidin
Density:	~1.1-1.2 g/cm ³ , depending on diameter

Procedure

Researchers are advised to optimize the use of particles in any application. For a detailed coating protocol, see the Product Data Sheet for our PolyLink Protein Coupling Kit (PDS 644). For detailed covalent coupling procedures, please see TechNote 205, *Covalent Coupling*.

Storage and Stability

Store at 2-8°C. Freezing or drying microspheres may result in irreversible aggregation and loss of binding activity.

Safety

This particle suspension contains sodium azide. Sodium azide may react with lead and copper plumbing to form explosive metal azides. Upon disposal of material, flush with a large volume of water to prevent azide accumulation. Please consult the Material Safety Data Sheet for more information.

This product is for research use only and is not intended for use in humans or for *in vitro* diagnostic use.

Ordering Information

Catalog Code	Description	Sizes
UMC3N	COMPEL™ 3µm and 6µm	0.25g, 0.5g, 1.0g, 1.5g, or 5.0g
UMC4N	COMPEL™ 8µm	0.25g, 0.5g, 1.0g, 1.5g, or 5.0g

**Catalog Code**

UMC3F

UMC4F

CM01N

Description

COMPEL™ 3µm and 6µm, Fluorescent

COMPEL™ 8µm, Fluorescent

COMPEL™ Streptavidin-coated

Sizes

1mL, 5mL, 10mL, or 100mL

1mL, 5mL, 10mL, or 100mL

1mL, 5mL, 10mL, or 100mL

Related Product**Catalog Code**

PL01N

Description

PolyLink Protein Coupling Kit

Size

1 kit

Order online anytime at www.bangslabs.com.