

# COMPEL™

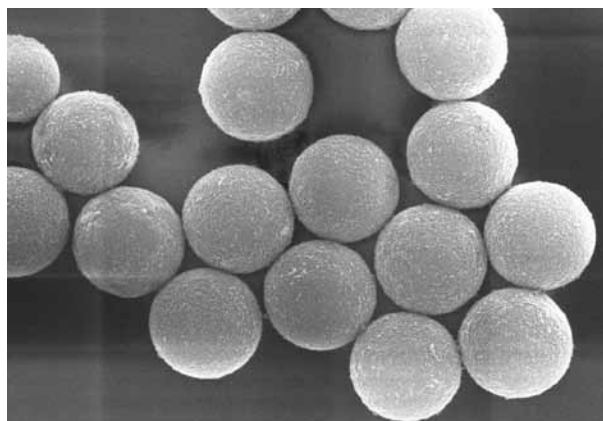
## Uniform Magnetic Microspheres



BEADS • ABOVE THE REST



**COMPEL™ Uniform Magnetic Microspheres are offered with excellent quality, uniformity, and reproducibility.**



COMPEL™ 6µm Uniform Magnetic Microspheres

### COMPEL™ UNIFORM MAGNETIC MICROSPHERES

#### Benefits

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 used for the capture and separation of target. Unwanted sample constituents may be washed away following a simple magnetic separation step. Highly efficient magnetic separations eliminate potential interfering molecules, allowing sensitive detection of target.

#### Characteristics

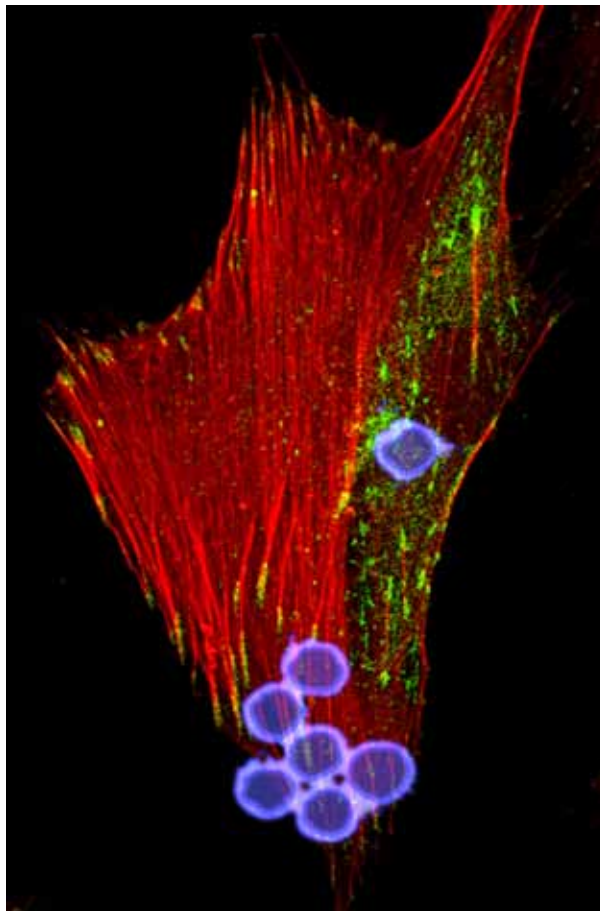
In diameters of approximately 3, 6, and 8µm, with CV's  $\leq 5\%$ , COMPEL microspheres are ideal for applications that demand uniform bead response, such as miniaturized bioassays and separations. The high level of functionalization permits efficient coupling of biomolecules, such as antibodies and nucleic acids.

COMPEL microspheres are synthesized using a proprietary process that allows the specific deposition of magnetite very near the bead surface. Beads are overcoated with 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 non-magnetic polymeric beads ( $\sim 1.1 \text{ g/cm}^3$ ).

The polymer matrix is conducive to dyeing, and standard green and red fluorescent versions are available. In fact, we like to dye them so well that we used them to develop QuantumPlex™M, our magnetic bead platform for suspension arrays.

COMPEL magnetic particles respond rapidly and efficiently to an applied magnetic field.

COMPEL superparamagnetic particles complement Bangs' established line of microsphere products. COOH, fluorescent COOH, and Streptavidin versions are available.



Collagen-coated (blue) 6µm COMPEL™ spheres in a study of mechanical stimulation of integrin receptors at the cell surface.

## COMPEL™

### Cat. # Product Description

|       |  |
|-------|--|
| UMC3N | COMPEL™ 3µm and 6µm                            |
| UMC4N | COMPEL™ 8µm                                    |
| UMC3F | COMPEL™ 3µm and 6µm, Fluorescent               |
| UMC4F | COMPEL™ 8µm, Fluorescent                       |
| CM01N | COMPEL™ Streptavidin-coated, 3µm, 6µm, and 8µm |
| 250   | QuantumPlex™M Carboxyl                         |
| 252   | QuantumPlex™M Streptavidin                     |

## Bangs Laboratories, Inc.

**Bangs Laboratories** supplies a large variety of uniform polymeric and silica microsphere products setting the standards for diagnostic, research, and flow cytometry applications. No matter the project, we have a product that serves or we'll work to custom-design a solution to fit. And that's not the half of it.

We also stand behind our products. Regardless of the size of your question or the size of your company, we offer tech support, absolutely free.

**Sound interesting? Give us a call.**



# 317.570.7020

BSS 003 – COMPEL™. Revision 1.03