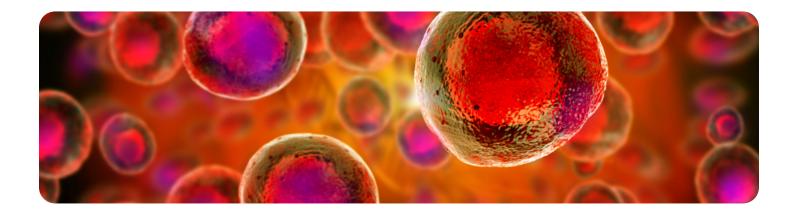
# ANALYTICAL INSTRUMENT STANDARDS FOR BIOPROCESSING



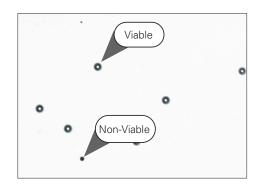


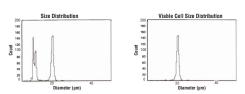
## VIACHECK™ CELL VIABILITY INSTRUMENT STANDARDS

Trypan blue dye exclusion is a common method for the determination of cell viability. It is used extensively in cell and tissue culture programs, and for a range of research studies including apoptosis, cytopathic effects of viral infection, and effects of sample processing methods on cell viability and concentration.

Instrumental methods for cell viability analysis provide significant advantages over manual determinations, offering high accuracy, precision, and throughput. However, as with any analytical instrument, it is important to implement a QC program to ensure confidence in results.

ViaCheck™ Viability Instrument Standards are an addition to our extensive line of microsphere standards for instrument QC. ViaCheck™ standards mimic the light scattering characteristics of live and dead cells in the trypan blue dye exclusion method, and may be used to confirm the capabilities and verify the performance of image-based cell viability instruments. The standards are available in a range of common concentrations and live / dead ratios.





# SURECOUNT™ PARTICLE COUNT STANDARDS

Particle counting instruments are employed in many research fields and commercial industries. This technology is used to assess the effectiveness of laboratory processes such as water filtration, and to determine particulate levels in environmental water samples. Automated particle counters are used to support industrial contamination control programs and also in the evaluation of finished products such as ultrapure chemicals or pharmaceutical parenterals.

Though the application of particle counting technology is diverse, there is a common need for instrument validation and ongoing QC. Microsphere-based particle count standards may be used to validate liquid counters across their dynamic ranges and to ensure continued capability through the performance of daily QC checks. The use of a reference material permits the standardization of results between runs, instruments and laboratories, and over time.

SureCount<sup>™</sup> Particle Count Standards are suspensions of polymer microspheres intended for the validation and monitoring of particle counters and supporting sample preparation processes. SureCount<sup>™</sup> standards are available in four sizes (3µm, 5µm, 10µm, or 15µm), with diameters traceable to NIST Standard Reference Materials. The standards are supplied as ~1 x 10<sup>6</sup> microspheres/mL aqueous suspensions in 10mL volumes.

#### **NIST-TRACEABLE PARTICLE SIZE STANDARDS**

Accurate particle size and distribution analysis is critical to particle-based technologies in industry and research. The particle sizing instruments used to support research, manufacturing, and QC efforts in these sectors must be rigorously calibrated and validated to ensure the integrity of results.

Particle size standards may be used to validate sizing instruments across their dynamic ranges. They are suitable for use in the performance of routine instrument calibration checks and corrections, and in the support of practice standards, such as those published by ISO, ASTM International, CEN, and other organizations.

Our NIST Traceable Size Standards are monodisperse polystyrene spheres available in diameters ranging from 40nm to 175µm. Each bottle is provided with a Certificate of Traceability demonstrating that NIST Standard Reference Materials 1690, 1692, and 1961 were used to validate the accuracy and traceability of the calibration methods used to transfer the calibrated mean diameter dimension of this product. Standards are supplied in de-ionized water with a trace amount of a proprietary surfactant and sodium azide.

### FLOW CYTOMETRY STANDARDS

Polysciences offers fluorescent and antibody capture microspheres that provide standardization and analysis solutions for clinical and research flow cytometry laboratories. Our products include Quantum™ MESF and Simply Cellular® systems for cellular expression analysis, QuantumPlex™ for multiplexed assay development, and a large array of Fluorescence Reference Standards. We are also pleased to offer our innovative Simply Cellular® Compensation Standard for Violet Laser, which complements our other tools for instrument QC and set-up.

If a product that you require is not listed in our catalog, please check our website (www.polysciences.com) as our product line is continually expanding. For special requirements, please contact us regarding our custom synthesis and contract manufacturing services.

Order today at Polysciences.com





