

TECHNICAL DATA SHEET 730

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ViaCheck™ 50% Viability Control

Description

ViaCheck 50% Viability Control is a suspension of ~10µm blue microspheres and ~20µm undyed microspheres. The microsphere mixture simulates a 50:50 ratio of live and dead (or dying) cells stained with Trypan Blue. ViaCheck Viability Controls are image based instrument viability controls. These particle standards offer discrete “live” and “dead” populations. They can be delivered in customizable ratios and concentrations.

Characteristics

Viability:	50% (45-55%)
Bead Concentration:	0.9 x 10 ⁶ - 1.1 x 10 ⁶ particles/ml
Particle Size:	9-12µm; 18-22µm

Material

Material Supplied

- 20ml of ~10µm blue particles and ~20µm undyed microspheres in a solution of buffered salts and surfactant containing 0.08% sodium azide

Material Required

- Cell Viability Analyzer ex. Coulter ViCell XR Cell Viability Analyzer
- Precision pipets with disposable tips to deliver 20-200µl, 200-1000µl
- Isotonic Buffered Saline Diluent (optional)

Procedure

For the best accuracy be sure to work carefully and quickly when sampling and pipetting ViaCheck particles. Allowing the particles to stand for even a short period of time could lead to inaccurate data and results.

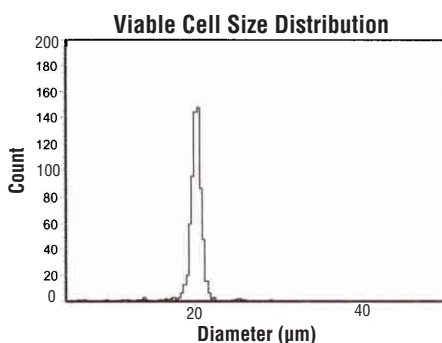
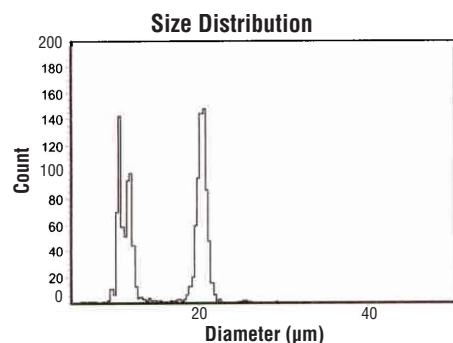
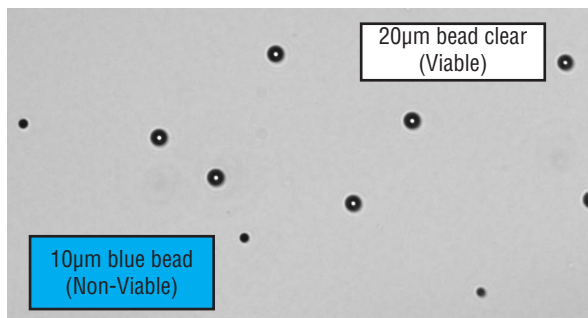
1. Vortex and mix (inversion or tube rotator) the vial of particles to ensure a well mixed suspension.
2. Place a minimum of 0.5 - 1.0ml of the particles into an analyzer sample cup.
3. Place the sample cup in the analyzer sampling station.
4. Using the ViCell XR analyzer menu, set up and save a “CELL TYPE” for Viability controls at the settings below. Note: These settings are guidelines to allow the user to analyze the ViaCheck Viability Control Particles and may have to be adjusted for each instrument.

<u>Cell Type</u>	<u>Viability Control</u>
Minimum Cell Diameter	5 (µm)
Maximum Cell Diameter	50 (µm)
Minimum Circularity	0.9
Dilution Factor	1.0
Cell Brightness	85%
Cell Sharpness	100%
Viable Cell Spot Brightness	60%
Viable Cell Spot Area	3.0%

<u>Cell Type</u>	<u>Viability Control</u>
Decluster Degree	Low
Aspirate Cycles	2
Trypan Blue Mixes	3

5. Analyze the sample according to the analyzer's instruction.

Photograph and ViCell XR data of ViaCheck 50% Viability Control Particles



RESULTS

Cell Count	1286
Viable Cell Count	677
Viability (%)	52.6
Total Cells / ml (x 1.0E6)	1.32
Viable Cells / ml (x 1.0E6)	0.69
Average Diameter (µm)	15.98
Average Circularity	0.95
Images	50
Averages Cells / Image	25.7
Average Background Intensity	205

Storage and Stability

Store at 4-30°C. Freezing particles 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

Cat. #	Description	Size
24623	ViaCheck™ 50% Viability Control	20ml

To Order

In The U.S. Call: 1-800-523-2575 • 215-343-6484
 In The U.S. FAX: 1-800-343-3291 • 215-343-0214

In Germany Call: (49) 6221-765767
 In Germany FAX: (49) 6221-764620

Order online anytime at www.polysciences.com.

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