

TECHNICAL DATA SHEET 732

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ViaCheck™ 90% Viability Control

Description

ViaCheck 90% Viability Control is a suspension of ~10µm blue microspheres and ~20µm undyed microspheres. The microsphere mixture simulates a 90:10 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:	90% (85-95%)
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

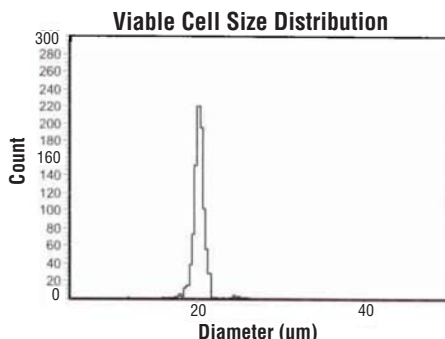
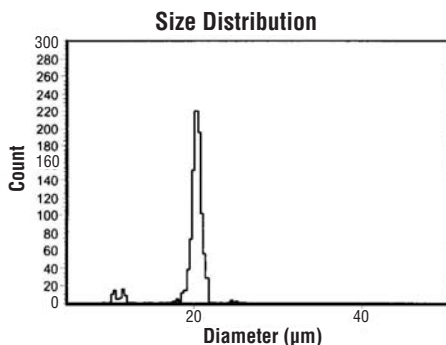
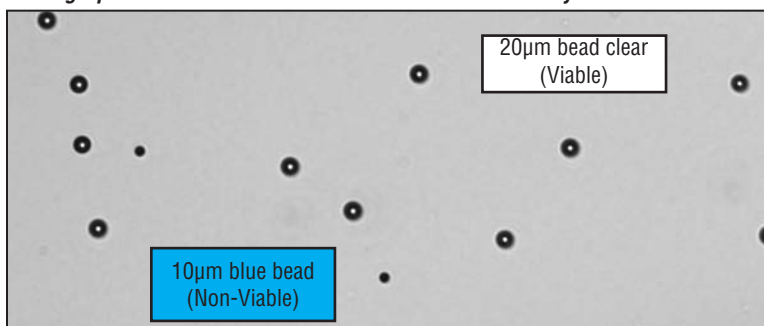
For the best accuracy be sure to work carefully and quickly when sampling and pipetting ViaCheck particles. Allowing the particles to stand for even a short period of time could lead to inaccurate data and results.

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>	<u>Cell Type</u>	<u>Viability Control</u>
Minimum Cell Diameter	5 (µm)	Viable Cell Spot Brightness	60%
Maximum Cell Diameter	50 (µm)	Viable Cell Spot Area	3.0%
Minimum Circularity	0.9	Decluster Degree	Low
Dilution Factor	1.0	Aspirate Cycles	2
Cell Brightness	85%	Trypan Blue Mixes	3
Cell Sharpness	100%		

5. Analyze the sample according to the analyzer’s instructions.

Photograph and ViCell XR data of ViaCheck 90% Viability Control Particles



RESULTS

Cell Count	1002
Viable Cell Count	930
Viability (%)	92.8
Total Cells / ml (x 1.0E6)	1.03
Viable Cells / ml (x 1.0E6)	0.95
Average Diameter (µm)	19.69
Average Circularity	0.95
Images	50
Averages Cells / Image	20.0
Average Background Intensity	204

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
24625	ViaCheck™ 90% Viability Control	20ml

Related Products

Catalog Code	Description	Size
24622	ViaCheck™ 0% Viability Control	20ml
24623	ViaCheck™ 50% Viability Control	20ml
24624	ViaCheck™ 75% Viability Control	20ml
24626	ViaCheck™ 100% Viability Control	20ml
24627	ViaCheck™ Concentration Control (1 x 10 ⁶)	20ml
24628	ViaCheck™ Concentration Control (4 x 10 ⁶)	20ml
24629	ViaCheck™ Concentration Control (8 x 10 ⁶)	20ml

To Order

In The U.S. Call: 1-800-523-2575 • 215-343-6484 In Germany Call: (49) 6221-765767
 In The U.S. FAX: 1-800-343-3291 • 215-343-0214 In Germany FAX: (49) 6221-764620

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