

TECHNICAL DATA SHEET 736

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ViaCheck™ Concentration Control (8 x 10⁶)

Description

ViaCheck Concentration Control particles are a suspension of ~10µm undyed microspheres that are produced at a fixed concentration of particles/milliliter. ViaCheck Concentration Controls are instrument standards for calibration and instrument monitoring of cell concentration (particles/ml) using Cell Viability Analyzers.

Characteristics

Bead Concentration: 8 x 10⁶ particles/ml (7.2 x 10⁶ - 8.8 x 10⁶ particles/ml)
Particle Size: 9-12µm

Material

Material Supplied

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

Material Required

- Cell Viability Analyzer or Particle Counter ex. Coulter ViCell XR Cell Viability Analyzer or Coulter Counter
- 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	2 (µm)
Maximum Cell Diameter	50 (µm)
Minimum Circularity	0.9
Dilution Factor	1.0
Cell Brightness	70%
Cell Sharpness	75%
Viable Cell Spot Brightness	55%
Viable Cell Spot Area	1.0%
Decluster Degree	Low
Aspirate Cycles	2
Trypan Blue Mixes	3

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

ViaCell XR data of ViaCheck Concentration Control (8 x 10⁶)

RESULTS

Cell Count	7885
Viable Cell Count	14
Viability (%)	0.2
Total Cells / ml (x 1.0E6)	8.09
Viable Cells / ml (x 1.0E6)	0.014
Average Diameter (µm)	9.01
Average Circularity	0.94
Images	50
Averages Cells / Image	157.7
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
24629	ViaCheck™ Concentration Control (8 x 10 ⁶)	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
24625	ViaCheck™ 90% 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

To Order

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