

Countess® Test Beads

Catalog no. C10284

Table 1. Contents and storage information.

Material	Amount	Size*	Concentration†	Storage
Countess® Test Beads	1 mL suspension	10 µm ± 10%	1 × 10 ⁶ beads/mL ± 10%	<ul style="list-style-type: none"> • 2–25°C • DO NOT FREEZE

*Bead size range: 9–11 µm.

†Bead concentration range: 9.0 × 10⁵–1.1 × 10⁶ beads/mL

Introduction

The Countess® Test Beads are an accessory to the Countess® Automated Cell Counter. Their purpose is to aid the user in testing their instrument to ensure that it is properly counting and sizing the samples it reads. The Countess® Test Beads are latex beads with a nominal diameter of 10 µm ± 10% and are suspended to 1 × 10⁶ beads/mL ± 10%.

Note: Nominal diameter of 10 µm ± 10% means that the majority of beads in a lot might be as small as 9 µm or as large as 11 µm in diameter. Note that the distribution does not necessarily have a mean at 10 µm; the average size of beads in your vial might be anywhere from 9 µm to 11 µm.

Experimental Protocols

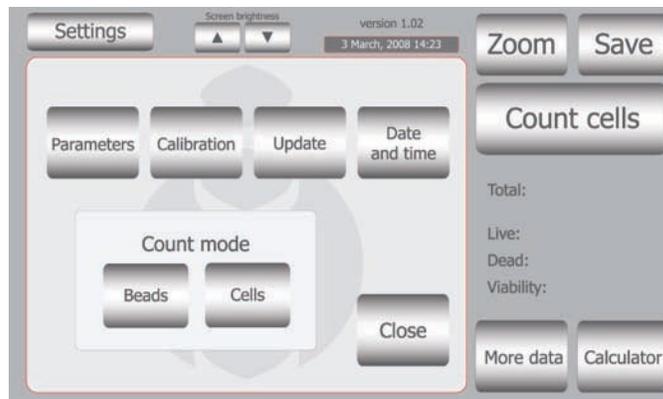
Instructions for using the Countess® Test Beads for verifying the proper functioning of the Countess® Automated Cell Counter is described below. For detailed instructions on using the Countess® Automated Cell Counter, refer to the manual supplied with the counter or download the manual from www.invitrogen.com.

Place the Counter to Bead Mode

1.1 Push the **Power** button to start the instrument. The Start-up screen is displayed.



1.2 Press **Settings** and then press **Beads** to place the instrument into bead counting mode. Beads option becomes shaded gray.



1.3 Press **Close**. The large button on the main screen displays “Count beads.”



Prepare Your Sample

- 2.1 Vortex the beads for 30 seconds on high to ensure that all beads are properly suspended in the mixture.
- 2.2 Mix 10 μ L of beads and 10 μ L of 0.4% trypan blue stain. Mix gently by pipetting up and down.
- 2.3 Load 10 μ L of this mixture into the Countess[®] chamber slide.
- 2.4 Insert the chamber slide sample side first into slide inlet on the instrument.
- 2.5 Ensure all beads have settled on the slide (i.e., the beads are not visibly moving once inserted into the instrument).
- 2.6 Ensure that the beads are in focus and press **Count beads** button.

Note: The beads settle rapidly. If you are working with multiple bead suspension samples, vortex the suspension immediately prior to into the Countess[®] chamber slide.

Verify Results

- 3.1 Press **More data**.
- 3.2 The information box displays the average bead size and concentration. Verify that each number falls within the expected range.

Table 2. Expected readout for bead size and concentration.

Bead size*	Concentration
8–12 μ m	9.0×10^5 – 1.1×10^6 beads/mL

*The Countess[®] Automated Cell Counter is accurate within $\pm 10\%$ of the bead size. The values given here is a combination of the instrument range and the range of the beads.

Product List Current prices may be obtained from our website or from our Customer Service Department.

Cat. no.	Product Name	Unit Size
C10284	Countess [®] test beads *for use with Countess [®] automated cell counter* 1×10^6 beads/mL $\pm 10\%$ *	1 mL
Related Products		
C10228	Countess [®] Cell Counting Chamber Slides *50 slides (100 counts)*	1 box
C10312	Countess [®] Cell Counting Chamber Slides *500 slides (1,000 counts)*	10 boxes
C10313	Countess [®] Cell Counting Chamber Slides *1,250 slides (2,500 counts)*	25 boxes
C10314	Countess [®] Cell Counting Chamber Slides *2,500 slides (5,000 counts)*	50 boxes
C10315	Countess [®] Cell Counting Chamber Slides *5,000 slides (10,000 counts)*	100 boxes
T10282	Trypan blue stain *0.4%*	2 \times 1 mL

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