# BD™ CS&T RUO Beads

| Catalog number | Number of tests |
|---|---|
| 661414 | 50 |
| 661415 | 150 |

## DESCRIPTION

BD™ CS&T RUO beads allow the software to automatically characterize, track, and report performance measurements of supported BD flow cytometers.[1-5] The beads are dyed with fluorochromes which are excited by the cytometer's lasers.

## MATERIALS

BD CS&T RUO beads consist of equal quantities of 3-µm bright, 3-µm mid, and 2-µm dim polystyrene beads in phosphate buffered saline (PBS) with bovine serum albumin (BSA) and 0.1% sodium azide.

### Reagents and materials provided

Contents are listed per package.

- Catalog No. 661414 contains two 3-mL vials at 25 tests per vial for 50 tests
- Catalog No. 661415 contains six 3-mL vials at 25 tests per vial for 150 tests

### Materials required but not provided

- Disposable 12 × 75-mm Falcon® capped polystyrene tubes, or equivalent
- Dilution buffer for the appropriate instrument

## HANDLING AND STORAGE

Store vials at 2°C–8°C and protect from light. Do not freeze. The beads are stable until the date shown on the vial label when stored as directed. Do not use after the expiration date. Some of the dyes used to manufacture the beads are very light sensitive. Fluorescence intensity levels can change if the beads are exposed to light.

After dilution, the beads are stable for:

- 8 hours at 15°C–25°C or
- 24 hours at 2°C–8°C

when protected from light.

## SUPPORTED INSTRUMENTS

BD CS&T RUO beads can be used on the following BD instruments designated for research use:

| Instrument | Software | Diluent |
|---|---|---|
| BD Accuri™ C6 Plus flow cytometer | BD Accuri™ C6 Plus or BD CSampler™ Plus | Deionized (DI) water |
| BD FACSMelody™ cell sorter | BD FACSChorus™ | PBS |
| BD FACSLyric™ flow cytometer | BD FACSuite™ | BD FACSFlow™ sheath fluid[a] |

a. BD FACSFlow sheath fluid (Catalog No. 342003) or equivalent

**NOTE** In Europe and other regions where the BD FACSLyric flow cytometer is designated for in vitro diagnostic use, use BD™ CS&T beads (Catalog No. 656504 or 656505).

**For Research Use Only. Not for use in diagnostic or therapeutic procedures.**

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12/2016 23-18217-01

## PROCEDURE

### Entering setup values for new lots

Before using a new lot of BD CS&T RUO beads, download the appropriate bead lot file. The information in the file is used by the instrument's software.

**To download the bead lot file:**

1. Visit bdbiosciences.com and click **Support** from the menu bar.

   The **Services** web page opens.

2. Select **Bead Lot Files:** for the appropriate instrument or software under **Top Support Links** in the right panel.

3. Follow the installation instructions on the website to download and import the appropriate bead lot file into the software.

   **NOTE** Ensure that the bead lot file you download is for BD CS&T RUO beads and corresponds to your current lot of beads. The lot number is found on the vial label. It is not the same as the kit lot number present on the box label.

### Preparing the beads

To properly perform quality control and set up the cytometer, do not dilute BD CS&T RUO beads more than recommended.

**To prepare the beads for acquisition:**

1. Label a 12 × 75-mm capped polystyrene tube.
2. When performing instrument setup tasks, add 500 µL of the appropriate diluent to the tube.
3. Thoroughly mix the BD CS&T RUO beads vial. Invert the vial 10 times, or vortex the vial at medium speed for 5–10 seconds.
4. Add 2 drops of the beads to the tube.

   Avoid dripping the beads down the side of the tube when diluting them. This can lead to low bead counts during acquisition.

   **NOTE** For instruments equipped with auto laser alignment, use 4 drops of beads diluted in 1 mL of diluent when running instrument Characterization Quality Control (CQC) or laser setup.

   **NOTE** If you will not be using the diluted beads right away, store the diluted beads at 2°C–8°C in the dark. Protect the diluted beads from light.

5. Vortex the tube immediately before acquiring it.

   For acquisition and troubleshooting information, see the User's Guide for your instrument.

## LIMITATIONS

- Because some of the dyes used to manufacture the beads are very light sensitive, protect the beads from light. Fluorescence levels can change if beads are exposed to direct light more than 20 minutes.
- For consistent results on the BD Accuri C6 Plus flow cytometer, we recommend always using DI water to prepare the beads and the same sample delivery method to run the beads.

## WARNING

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection[6,7] and dispose of with proper precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.



Document: 23-18217-01 Doc Type: ZMG Status: Released EFFECTIVE
Valid From: 27-Jan-2017 To: 31-Dec-9999 Doc Part: EN Revision: 01 Change #: 500000084929
Print Date: 06-Apr-2017 15:49:12 GMT Daylight Time Usage: Production Usage Version: A Classification: Public

## WARRANTY

Unless otherwise indicated in any applicable BD general conditions of sale for non-US customers, the following warranty applies to the purchase of these products.

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## REFERENCES


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## TRADEMARKS

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