



BD FACSVersTM FC Beads

Kit name	Catalog number
4c Research Kit	663106
4c Plus Research Kit	663107
Violet Research Kit	663108

DESCRIPTION

BD FACSVersTM FC Beads are fluorescent beads that enable the software to determine spillover values (SOVs) for fluorescence compensation and calculate a fluorescence compensation matrix during setup of BD FACSVersTM flow cytometers. The combination of BD[®] CS&T Beads and BD FC Beads sets the voltage and compensation for each of the channels of the instrument.

MATERIALS

BD FC Beads are 3- μ m polystyrene beads coupled to fluorochromes and provided dried in single-use 12 \times 75-mm tubes. Each tube comprises a mixture of positive beads and negative beads. The beads are rehydrated with bead dilution buffer before use.

Reagents provided:

The beads are coupled to fluorescent dyes that will compensate for the fluorochromes listed. Five tubes of one of the BD FC Beads are provided desiccated in a resealable foil pouch.

4c Research Kit:

- FITC
- PE
- PerCP
- APC

4c Plus Research Kit:

- PerCP-CyTM5.5
- PE-CyTM7
- APC-CyTM7
- APC-H7

Violet Research Kit:

- BD HorizonTM V450

In addition, each kit contains:

- BD[®] FC Beads Dilution Buffer
- Bead lot file card

Reagents and materials required but not provided:

- Vortex mixer

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

Becton, Dickinson and Company
BD Biosciences
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San Jose, CA 95131 USA



HANDLING AND STORAGE

Store tubes at 2°C–8°C in the foil pouch. The tubes should not be frozen. Protect the tubes from exposure to light and humidity. The beads and dilution buffer are stable until the expiration date shown on the pouch and bottle labels when stored as directed. Do not use after the expiration date.

NOTE Reseal the pouch and return it to 2°C–8°C storage immediately. The reagent is very sensitive to moisture. Do not remove the desiccant pack from the pouch.

Some of the dyes used to manufacture the beads are very light sensitive. Fluorescence spillover values can change if the beads are exposed to light.

SUPPORTED INSTRUMENTS

BD FC Beads can be used on a BD FACSVerserTM flow cytometer running BD FACSuiteTM software.

PROCEDURE

Entering setup values for new lots

Before preparing the beads, verify that Performance QC passed.

Before using a new lot of beads, either scan the barcode on the bead lot card (included in each kit box) or download and import the appropriate bead lot file. This file contains the lot number, expiration date, and spectral overlap factors (SOFs) for the new bead lot. BD FACSuite software uses this information to set reference settings.

To scan the barcode on the bead lot card:

1. Navigate to the Library and select **Beads and Reagents > FC Beads**.
2. Click **Scan Barcode**.

The **Scan Barcode** dialog opens.

3. Scan the barcode into the dialog.
4. Click **OK**.

To download the bead lot file:

1. Click on the link for your region in the table.

Region	Link
United States	https://www.bdbiosciences.com/beadlotfile_us
Canada	https://www.bdbiosciences.com/beadlotfile_ca
Europe	https://www.bdbiosciences.com/beadlotfile_eu
Australia/New Zealand	https://www.bdbiosciences.com/beadlotfile_anz
Brazil	https://www.bdbiosciences.com/beadlotfile_br
India	https://www.bdbiosciences.com/beadlotfile_in
Singapore	https://www.bdbiosciences.com/beadlotfile_sg
Japan	https://www.bdbiosciences.com/beadlotfile_jp

For regions without a link, please contact BD Biosciences Customer Support or your local sales representative.

The Bead Lot Files webpage opens.

2. Expand the BD FACSVerserTM section.
3. Follow the installation instructions on the webpage to download the bead lot file.

NOTE The last set of numbers in the bead lot file should match the lot number found on the box label.

Preparing the beads

To prepare the beads for acquisition:

1. Allow the bead pouches to reach room temperature, 18°C–25°C.
2. Open a pouch, remove one tube, and place it in a rack, protected from light.
3. Reseal the pouch and return it to 2°C–8°C storage immediately. Do not remove the desiccant pack from the pouch.
4. Repeat steps 2 and 3 for the remaining tubes that you want to use.
5. Add 0.5 mL (10 drops) of BD FC Beads Dilution Buffer to each tube.

NOTE Use of other dilution buffers could result in incorrect SOVs.

6. Vortex the tubes vigorously for 3–5 seconds to rehydrate the beads.
7. Store the rehydrated beads at 2°C–8°C, protected from light, if not using immediately.

After rehydration, when protected from light, the beads are stable for:

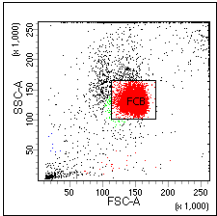
- 1 hour at 18°C–25°C
- 4 hours at 2°C–8°C

Creating or updating
reference settings

See the *BD FACSVerserTM System Reference Guide* for instructions to create or update reference settings.

REPRESENTATIVE DATA

The plot shows BD FC Beads acquired on a BD flow cytometer. For each bead, draw a gate around the singlet population in the FSC-A vs SSC-A dot plot. The events inside the FCB gate include both the positive beads and negative beads for the specified fluorophore. Gate on both the positive beads and the negative beads in the appropriate histogram when calculating compensation.



WARNING

The beads contain 0.8121% 2-methyl-4-isothiazolin-3-one (CAS number 2682-20-4) and 0.0626% sodium azide (CAS number 26628-22-8).

	Warning
	H317: May cause an allergic skin reaction. H412: Harmful to aquatic life with long lasting effects.
Prevention	P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release to the environment.
Response	P302+P352: IF ON SKIN: Wash with plenty of water/... P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P363: Wash contaminated clothing before reuse.
Disposal	P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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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