

ab322702 – Amine-Reactive Dye Compensation Beads Kit (7-7.9 µm)

For labelling with LIVE/DEAD® stains or other amine-reactive dyes to generate compensation controls for flow cytometric analysis.

For research use only - not intended for diagnostic use.

For overview, typical data and additional information please visit:

<http://www.abcam.com/ab322702>

Storage and Stability:

The entire kit may be stored at +4°C for up to 1 year from the date of shipment. Do not freeze and protect the kit from light. For prepared reagent storage, see table below.

Materials Supplied

Item	Quantity	Storage Condition
Amine-Reactive Dye Compensation Particles, High Binding, 7.0-7.9 µm, ~1E7 Particles/mL, 5 mL	1 x 5 mL	+4°C
Amine-Reactive Dye Compensation Particles, Negative, 7.0-7.9 µm, ~1E7 Particles/mL, 5 mL	1 x 5 mL	+4°C

Materials Required, Not Supplied

These materials are not included in the kit, but will be required to successfully utilize this kit:

- Amine reactive dye(s).
- Flow cytometer.
- Precision pipettes.
- Adjustable 1 µL-1 mL pipettes for reagent preparation.
- Microcentrifuge Tubes.
- PBS
- Vortex mixer
- Microcentrifuge
- Sonicator
- Computer and software for fluorescence histogram data analysis.

Reagent Preparation

- Before use resuspend by vortexing. To achieve optimum particle suspension, sonicate the reagent after vortex mixing.
- Equilibrate the beads to room temperature (18-25°C) prior to use.
- Prepare only as much reagent as is needed on the day of the experiment.

Assay Procedure

1. Remove Amine-Reactive Beads from the refrigerator, allow them to come to room temperature and briefly vortex.
2. Add 1 drop (~50 µL) of the High Binding beads to a 1.5mL microcentrifuge tube.

3. Wash the beads by adding 0.5mL of PBS that is free of surfactant and blocker to the microcentrifuge tube and centrifuge at 300 x G for 5 minutes. Decant and repeat.
4. Decant and resuspend in 50µL PBS with a brief vortex.
5. Prepare the amine reactive dye according to the manufacturer's instructions.
6. To label the High Binding beads, add 1-4µL of the amine reactive dye to the bead suspension and briefly vortex. Protect the tube from light and allow incubation at room temperature for 30 minutes.
 - a. *Note: Protect the beads from light after exposure to the dye. Use immediately after staining.*
7. Add 1ml of PBS to the same bead suspension tube and briefly vortex. Centrifuge at 300 x G for 5 minutes, decant and repeat.
8. Resuspend the beads in PBS containing 0.05% BSA with brief vortex.
9. Add a drop (~50 µl) of the Negative Binding beads to the labelled High Binding beads.
10. Analyze on a flow cytometer using a live gate around the singlet population in the FSC/SSC dot plot.
 - a. *Note: Vortex the tube before analysing on the flow cytometer.*
11. Create a fluorescence histogram for the appropriate detectors and perform compensation to achieve the desired results.

We recommend that you assay all standards, controls and samples in duplicate. Prepare all reagents as directed in the previous section. Dye and bead concentrations may be further optimized for best results. Centrifugation force and time may need to be increased if needed.

For technical support contact information, visit: www.abcam.com/contactus

Copyright © 2025 Abcam, All Rights Reserved. All information / detail is correct at time of going to print.
Version 2a | 2025-06-17