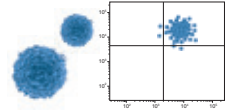


Positive cell isolation

QUICK GUIDE
Cell isolation using
Dynabeads® technology

Isolate cells from whole blood using Dynabeads® FlowComp™ technology



You can use Dynabeads® FlowComp™ technologies to easily isolate cells from whole blood. Collect your whole blood or buffy coat sample, then transfer a cooled (2–8°C) sample to a 5 mL FACS tube (for 1–2 mL blood), 15 mL tube (for 2–5 mL blood), or 50 mL tube (for 5–20 mL blood).

Cell incubation with FlowComp™ antibody:

1. Add 25 µL FlowComp™ antibody per 2 mL sample.
2. Mix well and incubate for 10 min on ice.
3. Add isolation buffer (sample volume x 2) (Figure 1, A–B).
Isolation buffer: PBS, 0.1% w/v BSA, 2 mM EDTA.
4. Centrifuge for 15 min at 600 x g without brake (Figure 1C).
5. Remove the same volume as added in step 3 (Figure 1D).

Cell isolation using FlowComp™ technology:

6. Add 75 µL FlowComp™ Dynabeads® suspension per 2 mL sample (Figure 2A).
7. Mix well and incubate for 15 min at room temperature with tilting and rotation (Figure 2, B–C).
8. Add isolation buffer (sample volume x 2) and mix well.
9. Apply magnet for at least 3 minutes and remove supernatant.
10. Repeat steps 8 and 9 twice (Figure 3, B–C).

Cell release with FlowComp™ Release Buffer:

11. Add 1 mL FlowComp™ Release Buffer per 2 mL sample.
12. Mix well and incubate for 10 min at room temperature with tilting and rotation (Figure 2C).
13. Pipette up and down 5–10 times before separating on the magnet for 1 min.
14. Collect released cells by transferring supernatant to a new tube.
15. Place the tube with the cells on the magnet for 1 min to separate any residual beads.
16. Repeat step 14.

Note: See product insert for detailed protocols for cell isolation from whole blood, buffy coat, or MNC.

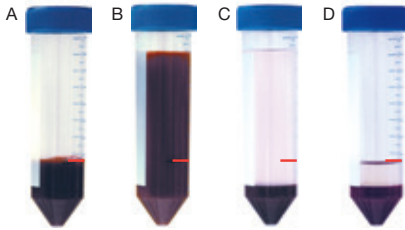


Figure 1. Wash after antibody incubation. Mark the tube to indicate your original sample volume (A), add isolation buffer (B), centrifuge without brake (C), and remove the supernatant to the mark (D).

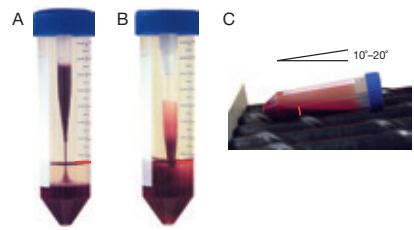


Figure 2. Cell isolation. Add Dynabeads® (A), mix well (B), and incubate with tilting and rotation (C). If required, tilt the mixer at an angle to avoid spilling sample into the tube cap (C).

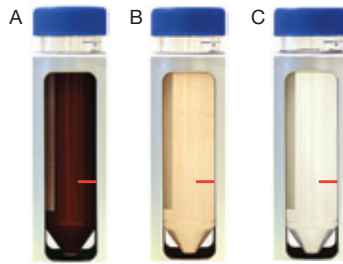


Figure 3. Wash prior to cell release. Check the efficiency of washing prior to cell release (after cell isolation) by observing the change in sample color during washing cycles (A–C).

Ordering information

Product	Cat. No.
Dynabeads® FlowComp™ Human CD4	11361D
Dynabeads® FlowComp™ Human CD8	11362D
Dynabeads® FlowComp™ Human CD3	11365D
Dynabeads® FlowComp™ Human CD14	11367D
Dynabeads® FlowComp™ Human CD45RA	11368D

All kits contain specific antibodies, FlowComp™ Dynabeads® suspension, and FlowComp™ Release Buffer, sufficient for processing 80 mL of whole blood.

For more information on gentle, tube-based positive isolation using Dynabeads® FlowComp™ technology, go to lifetechnologies.com/flowcomp

