

Antibody Stock Filtration and Purification Quick Guide

Below are guidelines for filtration and purification of antibody stock solutions for subsequent ChipCytometry staining.

Note: Antibodies should be kept at 4°C/39.2°F. Avoid long periods of time at RT. Do not freeze conjugated antibody solutions.

Filtration and Purification

1. Label a fresh 1.5mL or 2mL microtube with identifying information (target name, fluorophore, lot no., etc.).
2. Transfer the antibody stock solution into the labeled microtube and refrigerate until step 6.
3. Transfer the manufacturer label from the original antibody tube to a fresh 1.5mL or 2mL opaque storage tube.
4. Using a 2.0mL syringe, remove the plunger and attach a sterile 4mm diameter syringe filter with 0.2µm pore size to the luer tip.
5. Place the syringe with the attached filter tip onto the open storage tube. Optionally, secure them into a rack for increased stability.
6. Place the refrigerated microtube with antibody stock solution into a balanced centrifuge and spin for 10 minutes at 20,000xg.
7. Check the vial for sediment. If sediment is visible, antibody may need to be purified periodically to prevent precipitation.
8. Carefully transfer the supernatant into the 2mL syringe by pipetting it onto the bottom of the syringe.
9. Put the syringe plunger back into the syringe, but **Do Not Press Immediately!**
10. Hold the filter tightly with one hand and slowly increase the pressure on the syringe plunger with the other hand. **Do not force the plunger completely down to avoid splatter.** Gradually decrease force as volume decreases and patiently allow liquid to transfer into the labeled opaque storage tube.
11. Discard the syringe and store the tube containing the antibody stock at 4°C.