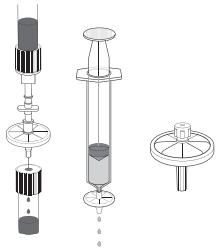
Figure 1. LeukoLOCK™ Total RNA Isolation System Overview

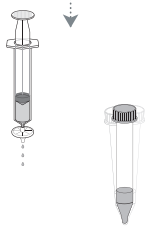
Sample Collection and Capture of Leukocytes



1. Collect 9–10 ml whole blood samples in EDTA-containing tubes
2. Assemble the sample tube/LeukoLOCK Filter apparatus
3. Pass blood through the LeukoLOCK Filter using an evacuated tube as vacuum source
4. Flush filter with 3 ml of PBS and 3 ml of RNA*later*®
5. Seal the LeukoLOCK Filter ports

Potential stopping point

LeukoLOCK Filter Processing and Cell Lysis

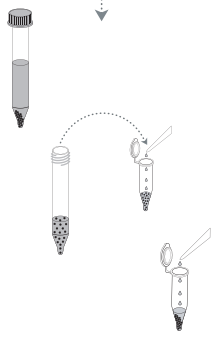


1. Prepare pH-adjusted Lysis/Binding Solution
2. Remove residual RNAlater from LeukoLOCK Filter
3. Flush with 2.5 ml pH-adjusted Lysis/Binding Solution; collect lysate in 15 ml tube

Potential stopping point

4. Add 2.5 ml Nuclease-free Water and 25 µl Proteinase K, and shake for 5 min

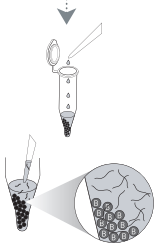
RNA Isolation



1. Add 50 µl RNA Binding Beads and 2.5 ml 100% isopropanol, and incubate at room temp for 5 min
2. Recover the RNA Binding Beads and discard the supernatant
3. Wash with 1.2 ml Wash Solution 1 and transfer the RNA Binding Beads to a 1.5 ml Processing Tube
4. Recover the RNA Binding Beads and discard the supernatant
5. Wash RNA Binding Beads with 750 µl Wash Solution 2/3

(Optional) TURBO DNase Treatment

Final Wash and Elution



1. Wash the RNA Binding Beads with 750 µl Wash Solution 2/3 and air dry briefly
2. Elute the RNA with ≤150 µl Elution Solution