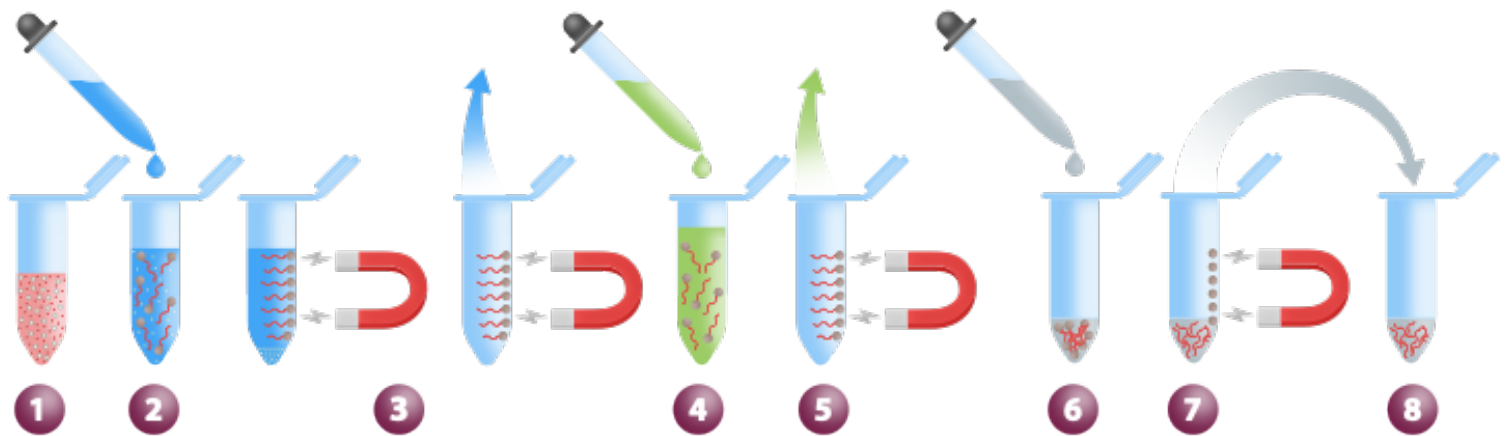


Viral RNA Purification

Magnetic Bead-Based RNA Isolation from Complex Body Fluids



- 1** In 1.5 mL microfuge tube, add 20 μL of Proteinase K and 100 μL of sample (serum/plasma, saliva, sputum, cell/mucus-laden swab samples or culture supernatants)
*Optional: If extracting/purifying low RNA concentrations, also add 2.5 μL of **Carrier RNA** to sample*
Note: Sputum/Swab samples may need to be vortexed, then centrifuged to remove debris
- 2** Add 400 μL of **Viral Lysis/Binding Buffer** and mix well by pipetting up-down 10-15x. In lieu of manual mixing, pulse vortex for 15 seconds. Incubate 5 mins to allow for lysis and RNA binding.
For vortexed samples, perform rapid 2-5 second spin following incubation
- 3** Place tube on magnetic rack for 1-2 mins to capture RNA-bead complex, then discard supernatant
- 4** Remove tube from magnetic rack and resuspend RNA/bead complex in 600 μL of **Wash Buffer #1**
- 5** Return to magnetic rack for 5 mins, then discard supernatant. Repeat wash with 600 μL **Wash Buffer #2**, return to magnetic rack for 1-2 mins, then discard supernatant and leave to dry for 1 min
- 6** Remove tube from magnetic rack and resuspend RNA-bead complex in 50 μL of **Elution Buffer**. Mix well by pipetting up-down 10-15x to elute RNA from beads and let stand for 1-2 mins
- 7** Place tube on magnetic rack to separate beads (~1-2 mins)
- 8** Transfer clean RNA solution (supernatant) to clean tube