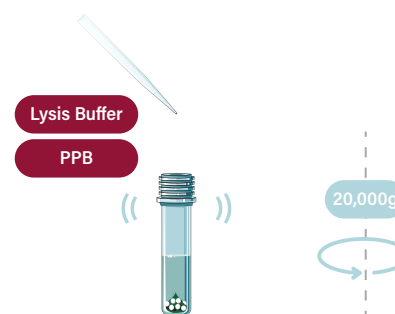


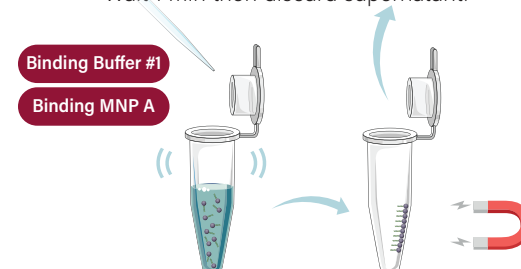
**1** Add up to 50mg of ground fresh plant leaves to the lysis bead tube provided.



**2** Add 600µl of Lysis Buffer and 60µl PPB. Mix for 3 mins using TissueLyser at max speed or vortex for 10 mins; then centrifuge at 20,000g for 2 mins.



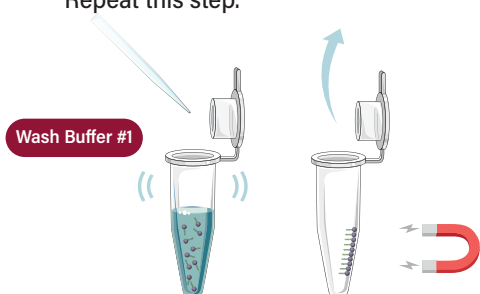
**3** Avoiding pellet, transfer up to 300–400µl of supernatant to clean centrifuge tube. Add 1000µl of Binding Buffer #1, 50µl of Binding Magnetic Nanoparticles **A**, vortex for 10–20s, and wait 5 mins. Place tube on magnetic rack to capture. Wait 1 min then discard supernatant.



**4** Add 600µl of Wash Buffer #1 to the tube and vortex for 10–20s.

Wait 1 min then place tube on magnetic rack to capture. Wait 1 min then discard supernatant.

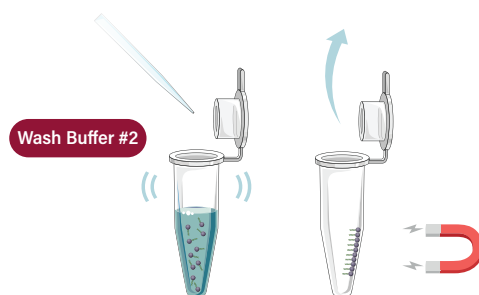
Repeat this step.



**5** Add 600µl of Wash Buffer #2 to the tube and vortex for 10–20s.

Place tube on magnetic rack to capture. Wait 1 min then discard supernatant.

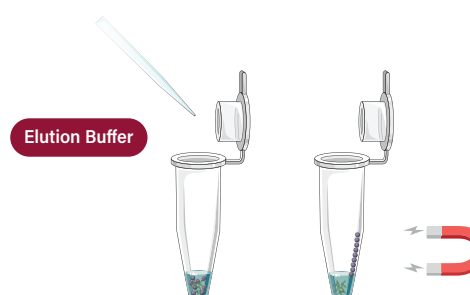
Repeat this step.



**6** Add 100µl of Elution Buffer to tube and mix briefly. Wait 1 min.

Place tube on magnetic rack to capture.

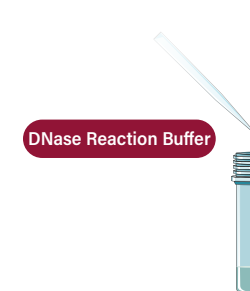
Wait 1 min then transfer supernatant to clean microfuge tube.



**7** Add 500µl of DNase Reaction Buffer to DNase pellet.

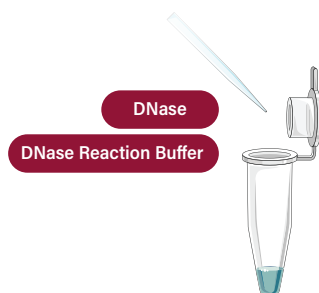
Mix by gently inverting the tube.

Reconstituted pellet must be stored at -20 °C.

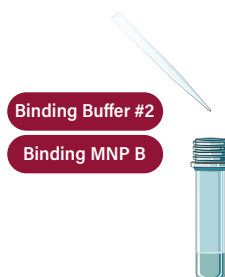


**8** For each RNA sample, add 10µl of the reconstituted DNase prepared in the previous step. Then add an additional 40µl of the DNase Reaction Buffer.

Mix DNase with buffer by gently inverting the tube a few times.



**9** Mix 40µl of Binding Magnetic Nanoparticles **B** with 400µl Binding Buffer #2.



**10** Add 400µl of Binding Bead and Binding Buffer #2 mixture to microfuge tube and vortex for 10s.

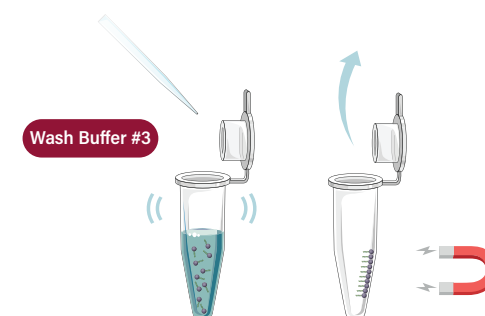
Incubate the mixture for 5 mins at room temperature.

Place tube on magnetic rack for 2 mins. Discard supernatant.



**11** Resuspend beads in 600µl Wash Buffer #3. Vortex for 10–20s.

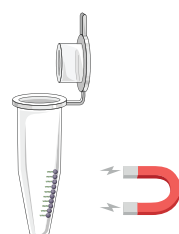
Place tube on magnetic rack, wait for 1 min and discard supernatant.



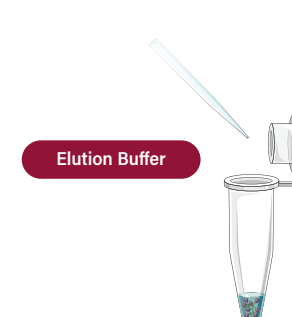
**12** Repeat washing step with Wash Buffer #3.



**13** Dry beads on magnetic rack for 2 mins after the third wash. Remove any wash buffer left at the bottom of tube at the end of drying step.



**14** Add 50µl of Elution Buffer to tube and mix briefly.



**15** Place tube on magnetic rack, wait for 1 min then transfer supernatant to clean tube.

