GALENVS

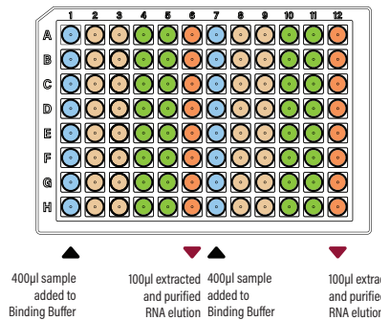
magnetiQ

Plant RNA Extraction Kit

Quick Start Guide

Part A RNA Extraction

- Binding Buffer (600µl) — Columns 1 & 7
- Wash #2 Buffer (600µl) — Columns 4 & 10, 5 & 11
- Wash #1 Buffer (600µl) — Columns 2 & 8, 3 & 9
- Elution Buffer (100µl) — Columns 6 & 12



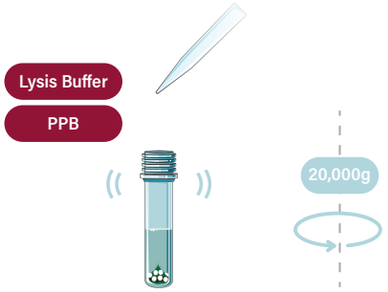
PRKit-A miQron protocol parameters

Step Name	Column	Volume (µl)	Time (sec)	Mixing Speed (1-10)	Dry Time (sec)	Magnet Capture Time (sec)
Binding	1 & 7	600	300	7	0	150
Wash #1	2 & 8	600	60	7	0	90
Wash #1	3 & 9	600	60	7	0	90
Wash #2	4 & 10	600	60	7	0	90
Wash #2	5 & 11	600	60	7	300	90
Elution	6 & 12	50	180	10	0	150
Discard Comb	2 & 8	600	0	5	0	0

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

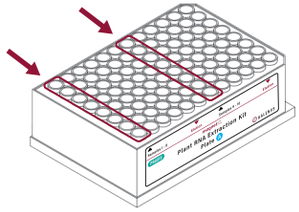
2 Add 600µl Lysis Buffer, and 60µl PPB.

Mix for 10 mins using TissueLyser at max speed or vortex for 10 mins; then centrifuge at 20,000g for 2 mins.

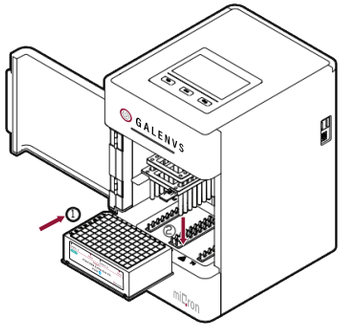


3 To the **RNA Extraction Kit Plate A** transfer up to 400µl of supernatant to Binding Buffer #1 (columns 1 & 7).

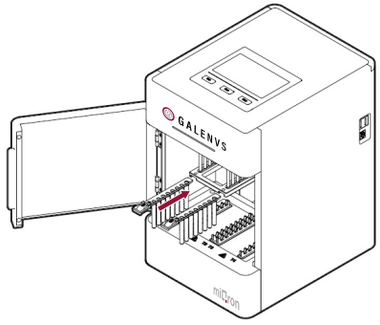
You can add up to 16 samples.



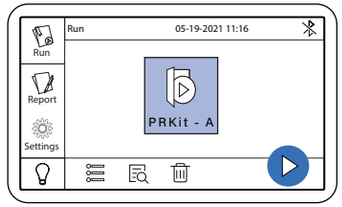
4 Place plate into the miQron, taking care that the label is facing outward.



5 Insert two combs.



6 Select **PRKit - Part A** and press ▶



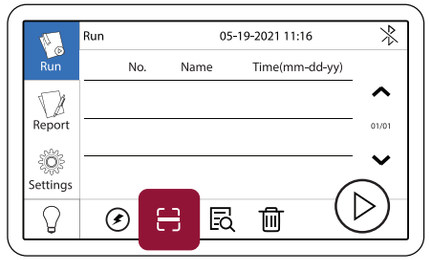
When program is complete, remove plate from miQron and discard combs.

Proceed to Part B DNase Treatment ➔

miQron

Protocol Update

To import the updated protocol into the miQron, press the **Scan Protocol** icon from the **Run** menu (protocol list view window). Use the scanner on the QR codes below.



PRKIT-A PROTOCOL V1.0

PRKIT-B PROTOCOL V1.0

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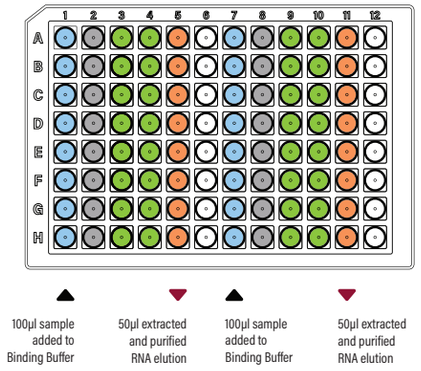
Plant RNA Extraction Kit

Quick Start Guide

Part B DNase Treatment



- Binding Buffer (400µl) — Columns 1 & 7
- Functionalized Beads (200µl) — Columns 2 & 8
- Wash #3 Buffer (600µl) — Columns 3 & 9, 4 & 10
- Elution Buffer (50µl) — Columns 5 & 11

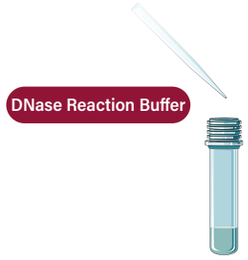
PRKit-B miQron protocol parameters

Step Name	Column	Volume (µl)	Time (sec)	Mixing Speed (1–10)	Dry Time (sec)	Magnet Capture Time (sec)
Bead Transfer	2 & 8	200	n/a	n/a	0	100
Binding	1 & 7	400	120	7	0	120
Wash #3	3 & 9	600	120	6	0	100
Wash #3	4 & 10	600	120	6	0	100
Elution	5 & 11	50	120	7	0	200
Discard Comb	3 & 9	600	0	5	0	0

7 Add 100µl of DNase Reaction Buffer to DNase pellet.

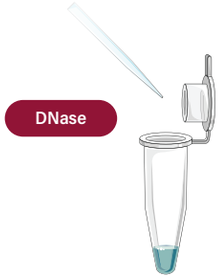
Mix by gently inverting the tube.

Reconstituted pellet must be stored at -20 °C.

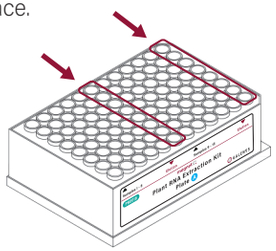


8 For each RNA sample, prepare DNase Buffer by adding 10µl of DNase prepared in the previous step to 40µl of DNase Reaction Buffer in a microfuge tube.

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

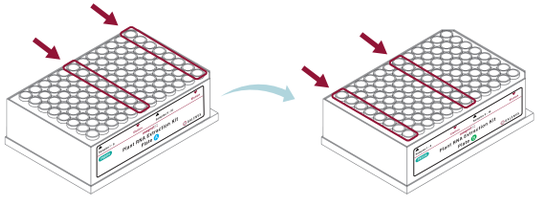


9 To the **RNA Extraction Kit Plate A** add 50µl of DNase Buffer to Elution Buffer (columns 6 & 12). Dispense directly into the elution buffer not on the walls. If there are any droplets of elution buffer left on the walls, slide them to the well bottom by gently shaking or tapping the plate on a solid surface.

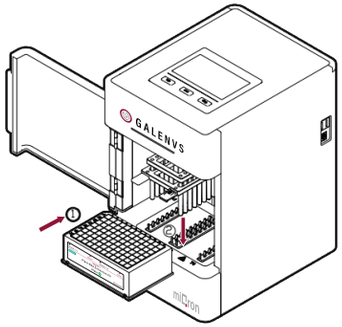


10 Gently shake **Plate A** for 10 seconds by hand and incubate at room temp for 20 mins.

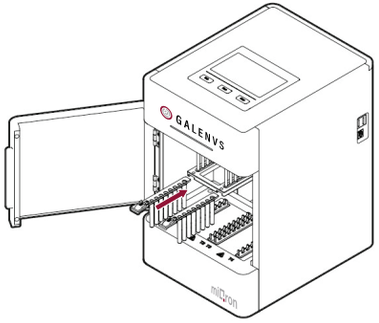
From the **RNA Extraction Kit Plate A** transfer 100uL of the Elution Buffer (columns 6 & 12) to each well (columns 1 & 7) of the **RNA Extraction Kit Plate B**



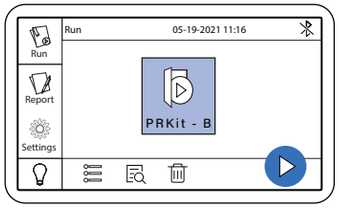
11 Place **Plate B** into the miQron, taking care that the label is facing outward.



12 Insert two combs.



13 Select **PRKit - Part B** and press ▶



When program is complete, remove plate from miQron and discard combs.

Columns 5 and 11 contain the purified RNA elution.