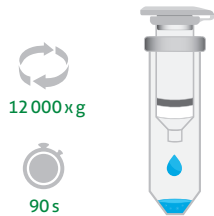


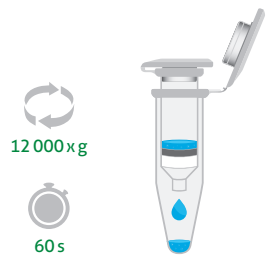
**STEP 8**



Centrifuge for 90 s at  $\geq 12\ 000 \times g$  (preferably at  $15\ 000 \times g$ ). Discard the collection tube and the filtrate and carefully transfer the purification minicolumn to a sterile RNase-free 1.5 ml Eppendorf tube.

⚠️ RW2 Buffer contains alcohol, which may interfere with some enzymatic reactions and decrease the elution efficiency. It is therefore crucial to remove the alcohol completely from the minicolumn before elution.

**STEP 9**



Add **50-100  $\mu$ l** elution buffer **REB**. Centrifuge for 60 s at  $\geq 12\ 000 \times g$  to elute purified RNA.

The isolated RNA is ready for use in downstream applications.

⚠️ Other buffer volumes in the 30-50  $\mu$ l range may be used. For instructions, see to section VIII. Recommendations and important notes.

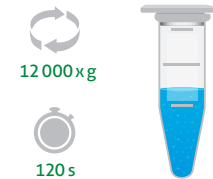
**STEP 1**



Place a fragmented biological material in a 2 ml tube. Add **600  $\mu$ l RLys Buffer** and vortex for 60 s.

Optional: antifoam agent can be added.

**STEP 2**



Centrifuge for 120 s at  $\geq 12\ 000 \times g$  (preferably at  $15\ 000 \times g$ ).

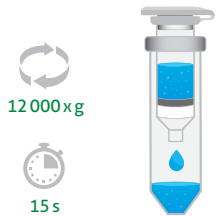
**STEP 3**



Transfer the supernatant into an **RNase-free 1.5-2 ml Eppendorf tube** and add **600  $\mu$ l 70% ethanol** to the transferred supernatant. Mix well by pipetting or vortexing.

⚠️ For homogenization with the use of bead-beating tubes: carefully pipet an appropriate volume of the supernatant by placing a 200  $\mu$ l pipette tip (N.B.: a 1 ml tip may be clogged by the beads) into the filling. Tissue remains should either lie on one side of the tube or at the bottom.

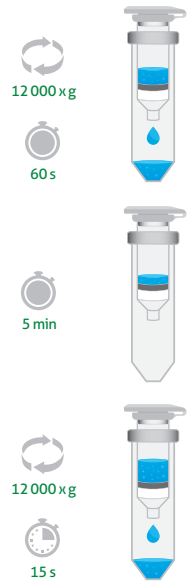
**STEP 4**



Transfer up to **700 µl of the obtained mixture** into an **RNA Purification Column** placed in a collection tube. Centrifuge for 15 s at  $\geq 12\,000 \times g$ . Discard the filtrate and reuse the column together with the collection tube.

Transfer the **remaining mixture** into the same purification minicolumn and centrifuge for 15 s at  $\geq 12\,000 \times g$ . Discard the filtrate and place the minicolumn in a new collection tube.

**STEP 5 / OPTIONAL (DNase treatment)**

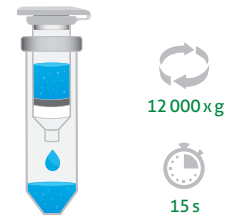


- Prewash the minicolumn with **500 µl RW2 Buffer** and centrifuge for 60 s at  $\geq 12\,000 \times g$ . Discard the filtrate and reuse the collection tube.
- For each isolation mix **90 µl Reaction Buffer** and **10 µl reconstituted DNase I** (not included in the kit). Mix by inverting the tube.
- Apply **DNaseI plus Reaction Buffer** onto the center of the RNA Purification Column. Incubate for 5 minutes at room temperature.
- Add **600 µl RW1 Buffer** and centrifuge for 15 s at  $12\,000 \times g$ . Discard the filtrate and reuse the collection tube. Proceed to **step 7**.

**STEP 6 / omit after DNase treatment**

Add **700 µl RW1 Buffer** and centrifuge for 15 s at  $\geq 12\,000 \times g$ .

Discard the filtrate and reuse the collection tube.



**STEP 7**

Add **500 µl RW2 Buffer** and centrifuge for 15 s at  $\geq 12\,000 \times g$ . Discard the filtrate and reuse the collection tube.

**Repeat step 7.**

