

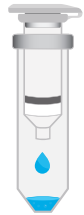
**STEP 8**



12 000 x g



90 s



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**



12 000 x g



60 s



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 **20  $\mu$ l AF Reagent** and vortex for 60 s.

**STEP 2**



12 000 x g



120 s



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**



12 000 x g



15 s



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.

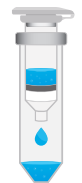
**STEP 5 / OPTIONAL (DNase treatment)**



12 000 x g



60 s



a. 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.

b. For each isolation mix **90 µl 10x DNase I Reaction Buffer** and **10 µl reconstituted DNase I**. Mix by inverting the tube.



5 min



c. Apply **95 µl mixture** onto the center of the RNA Purification Column. Incubate for 5 minutes at room temperature.



12 000 x g



15 s



d. 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.



12 000 x g



15 s

**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.**



12 000 x g



15 s



12 000 x g



15 s