FavorPrep™ RNA Clean Up Mini Kit

Kit Contents

Cat. No.	FARC1020 (4 Preps)	FARC1023 (50 Preps)	FARC1025 (200 Preps)
FARP Buffer	1.8 ml	30 ml	80 ml
Wash Buffer 1	1.5 ml x 2	30 ml	110 ml
Wash Buffer 2 (Concentrate)▲	1.5 ml	20 ml	35 ml x 2
RNase-Free Water	1.5 ml	6 ml	12 ml
FARB Mini Columns	4 pcs	50 pcs	50 pcs x 4
Collection Tubes	4 pcs	50 pcs	100 pcs x 2
Elution Tubes	4 pcs	50 pcs	100 pcs x 2
User Manual	1	1	1
Preparation of **Wash Buffer 2** by adding 96~100% ethanol.			
Volume of Ethanol for Wash Buffer 2▲	6 ml	80 ml	140 ml

All kit components are shipped at room temperature and should be stored at room temperatures between 15~25°C upon receipt.

Specification

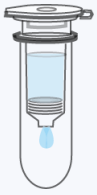
Format/Principle	Spin column (Silica matrix)
Binding Capacity	≤100 µg RNA/Column
Operation Time	<10 mins
Sample Size	≤ 100 µl of RNA sample or enzymatic reaction mixture
Recovery	85~95%
Elution Volume	30~50 µl

■ Procedure Overview

RNA Sample

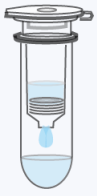
- Adjust the sample volume to 100 µl.
- Add 350 µl FARP Buffer.
- Add RNase-free 96~100% ethanol to the mixture.
  - For total RNA: add 250 µl.
  - For <500 nt RNA: add 550 µl.
- Mix well by vortexing.

FARB Mini Column



Centrifuge
10,000 xg, 1 mins

- Transfer up to 700 µl of the sample mixture into the FARB Mini Column for RNA binding. (Repeat the step if the mixture volume exceeds 700 µl.)



Centrifuge
10,000 xg, 1 mins

- Add 500 µl Wash Buffer 1 and centrifuge.
- Add 750 µl Wash Buffer 2 (ethanol contained) and centrifuge.

Centrifuge
10,000 xg, 3 mins

- Drying column membrane.

Centrifuge
10,000 xg, 2 mins

- Add 30~50 µl RNase-Free Water.
- Stand the column for 1 mins at room temperature.
- Obtain purified RNA.

■ Preparation Before Starting

1. Make sure everything is RNase-free when handling RNA.
2. Buffers provided in this system contain irritants. Wear gloves and lab coat when handling these buffer.
3. Additional materials: RNase-free 96~100%, 70% ethanol (optional), and DNase I (optional).
4. (Optional) Prepare DNase I working solution following the user guide of FavorPrep™ DNase I Solution (Cat. No. FADI209) and make the final concentration of 0.25 U/μl.
5. Add the indicated volume of ethanol (96~100%) into **Wash Buffer 2**, mix well, and store at room temperature.

■ General Protocol

- **Note:** All centrifugation steps should be performed at **14,000 rpm** or **10,000 xg** at room temperature.

1. Adjust the sample volume to 100 μl with RNase-Free Water (provided).
   - **Note:** The maximum sample volume is 100 μl.
2. Add 350 μl of **FARP Buffer** to the sample and vortex vigorously.
3. Add indicated volume of ethanol (96~100%) to the sample mixture and mix well by vortexing.
   - **For Total RNA:** Add 250 μl ethanol (96~100%).
   - **For <500 nt RNA:** Add 550 μl ethanol (96~100%).
4. Place a **FARB Mini Column** into a **Collection Tube** and transfer 700 μl ethanol-sample mixture (including any precipitate) to the FARB Column.
5. Centrifuge for 1 min, discard the flow-through and return the FARB Mini Column back to the Collection Tube. Repeat steps 4 and 5 if any sample mixture remains.
6. **(Optional) DNase I digestion.** To eliminate genomic DNA contamination, follow the steps from a.
   a. Add 250 μl of **Wash Buffer 1** to the FARB Mini Column, and centrifuge for 1 min. Discard the flow-through and place the FARB Mini Column in the Collection Tube.
   b. Add 750 μl of **RNase-free 70% ethanol** to the FARB Mini Column, and centrifuge for 1 min. Discard the flow-through and place the FARB Mini Column in the Collection Tube.
   c. Add 60 μl of **RNase-free DNase I solution** (0.25 U/μl, not provided) to the membrane center of the FARB Mini Column. Place the column on the benchtop for 15 mins.
   d. Proceed to step 8.

7. Add 500 µl **Wash Buffer 1** to the FARB Mini Column. Centrifuge for 1 min then discard the flow-through.
8. Add 750 µl **Wash Buffer 2** (ethanol contained) to the FARB Mini Column. Centrifuge for 1 min then discard flow-through.
9. Centrifuge for an additional 3 mins to dry the column. Discard Collection Tube.
10. Place the FARB Mini Column in an **Elution Tube**, then add 30~50 µl **RNase-Free Water** directly onto the membrane. Stand the FARB Mini Column for 1 mins.
    - **Important step!** For effective elution, ensure that the elution solution is dispensed onto the membrane center and absorbed completely.
11. Centrifuge for 2 mins to elute the RNA.
12. Store RNA at -70˚C.