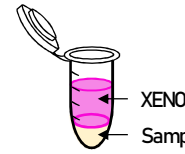
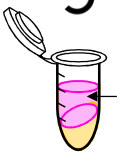
Quick Guide

Step 1 ~ 3

Lyse the sample in XENOSEPA™-TR Lysis Buffer.



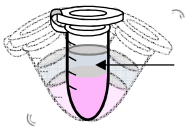
12,300 x *g*, 1 min



Transfer the supernatant to a new tube.

Step 4 ~ 5

Add 200 µl of chloroform and perform phase separation.



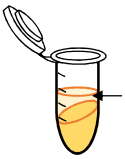
Vortex vigorously for 30 sec.

Incubate the mixture at RT for 3 min.

12,300 x *g*, 10 min, 4°C

Step 6

Transfer the upper aqueous phase into gDNA removal column.

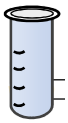


12,300 x *g*, 1 min, RT

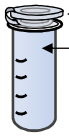
Collect the flow-through

Step 7~9

Mix 1 volume of BS-TR with the flow-through and load the mixture onto the RNA column.



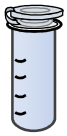
Mix gently by pipetting.



2,000 x *g*, 1 min, RT

Step 10~13

Discard the flow-through and wash the column.



2,000 x *g*, 1 min, RT
(per each washing step)

Place the column in a new collection tube and dry the column.

12,300 x *g*, 3 min, RT

Step 14

Transfer the column into a new microcentrifuge tube and elute RNA.

12,300 x *g*, 2 min, RT

Protocol: XENOPURE™ Total RNA Purification Kit

1. Lyse and homogenize samples in 1 ml XENOSEPA™-TR Lysis Buffer.

- For whole blood

Prepare 250 µl of whole blood and add 750 µl of XENOSEPA™-TR Lysis Buffer.

- For animal tissues

Homogenize 20 ~ 100 mg of tissue sample in 1 ml XENOSEPA™-TR Lysis Buffer using homogenizer.

- For cultured cells / bacteria

Harvest 10^5 ~ 10^7 cultured cells in 1.5 ml microcentrifuge tube and add 1 ml of XENOSEPA™-TR Lysis Buffer.

Harvest 1~2X10^9 bacterial cells/ml ($O.D_{600}$: 0.5 ~ 1.0) in 1.5 ml microcentrifuge tube and add 1 ml of XENOSEPA™-TR Lysis Buffer.

- For plant tissues

Homogenize 50 ~ 100 mg of plant sample using liquid nitrogen and add 1 ml of XENOSEPA™-TR Lysis Buffer.

2. Vigorously vortex the mixture for 1 min.
3. Centrifuge the mixture for 1 min at 12,300 x *g* and carefully transfer the supernatant to a new 1.5 ml microcentrifuge tube.
4. Add 200 µl of chloroform and vortex for 30 sec.
5. Incubate the mixture at room temperature (15–25°C) for 3 min and centrifuge the mixture for 10 min at 12,300 x *g* at 4°C.
6. Transfer the upper aqueous phase to a genomic DNA removal column and centrifuge for 1 min at 12,300 x *g* at room temperature (caution: Avoid transferring any interphase). Discard the removal column and **collect the flow-through** in a new 1.5 ml microcentrifuge tube.
7. Mix the flow-through with 1 volume of Binding Solution-Total RNA (BS-TR) gently (e.g., for 300 µl of aqueous phase, add 300 µl of BS-TR).
8. Pipet up to 700 µl of the mixture, including any precipitate, into a XENOPURE™ RNA column in a 2 ml collection tube. Close the lid and centrifuge at 2,000 x *g* for 1 min at room temperature. Discard the flow-through.
9. Repeat step 9 using the remainder of the sample.
10. Add 700 µl Washing Buffer (WB 1) to the XENOPURE™ RNA column. Close the lid, and centrifuge for 1 min at 2,000 x *g*. Discard the flow-through.

    (Option : Use On-Column XENO DNase Kit (Cat. No. 93660N265) for other sensitive application.)
11. Add 700 µl Washing buffer (WB 2) to the XENOPURE™ RNA column. Close the lid, and centrifuge for 1 min at 2,000 x *g*. Discard the flow-through.
12. Add 700 µl Washing buffer (WB 3) to the XENOPURE™ RNA column. Close the lid, and centrifuge for 1 min at 2,000 x *g*. Discard the flow-through.
13. Place the XENOPURE™ RNA column in a new 2 ml collection tube (supplied). Open the lid of the spin column and centrifuge at 12,300 x *g* for 3 min to dry the membrane. Discard the flow-through and the collection tube.
14. Place the XENOPURE™ RNA column in a new 1.5 ml microcentrifuge tube. Add 40 µl of Elution Buffer (EB) directly to the center of the XENOPURE™ RNA column membrane. Close the lid, and centrifuge for 2 min at 12,300 x *g* to elute the RNA.

※ XENOPURE RNA Purification Kit has been designed to effectively eliminate contaminants such as genomic DNA, proteins, etc. during the RNA purification process. This may result in lower RNA quantitative values than those of other company's.