

TransExo™ Urine Exosome Kit

Please read the datasheet carefully prior to use.

Cat. No. FE501

Storage: at 2-8°C for one year.

Description

TransExo™ Urine Exosome Kit is designed to extract and purify exosomes from urine. The obtained high-purity and high-activity exosomes can be used in Western Blot, qPCR, particle size, transmission electron microscopy, and other detection methods.

- Easy-to-use. No ultracentrifugation required.
- High sensitivity, low input (1 ml) of sample.

Kit Contents

Component	FE501-01
Exosome Precipitation Solution-Urine (EPS-U)	2×20 ml
Exosome Resuspension Solution-Urine (ERS-U)	10 ml

Procedures

1. Centrifuge the urine sample at 3,000×g for 30 minutes at 2-8°C to remove cells and debris. Collect the supernatant.
2. Mix the sample and EPS-U upside down according to the recommended dosage and ratio in the table below, and let it stand overnight at 2-8°C.

Sample Volume	EPS-U	Recommended Centrifuge Tube Specification
0.9 ml	0.3 ml	1.5 ml
10 ml	3.3 ml	15 ml

3. Mark the position of the pellet on the centrifuge tube containing the mixture that has been allowed to stand overnight. Place the centrifuge tube in the centrifuge according to the mark, and align the mark on the outside of the centrifuge rotor. Perform centrifugal separation according to the conditions recommended in the table below. It is recommended to use a swing-bucket rotor.

Sample Volume	Centrifuge Conditions
0.9 ml	Centrifuge at 12,000 ×g for 30 minutes at room temperature
10 ml	Centrifuge at 3,000 ×g for 30 minutes at room temperature

4. Discard the supernatant and collect the pellet. Centrifuge at 1200×g (0.9ml sample) or 3000×g (10ml sample) for 5 minutes. Carefully discard the remaining supernatant with a 200 µl pipette tip, avoiding the pellet position. It is recommended to centrifuge again for 5 minutes. And carefully discard the remaining supernatant with a 10 µl pipette tip, avoiding the pellet position.
5. Add ERS-U solution to the exosome pellet according to the recommended amount in the table below, and adjust the resuspension volume according to the actual needs. Resuspend the pellet by gently pipetting to obtain exosomes.

Sample Volume	Recommended ERS-U Volume
0.9 ml	40 µl
10 ml	400 µl

Notes

- After obtaining the urine sample, it is recommended to divide it into a single-use amount and store it at -80°C to avoid repeated freezing and thawing.
- The contents of exosomes in urine of different humans or animals are not exactly the same. When conducting experiments, pay attention to setting up parallel groups to obtain sufficient information.
- When using an angle rotor centrifuge, the exosomes pellet will adhere to the tube wall, which should be resuspended the exosomes on the tube wall with care. Some samples have a small amount of exosomes, so precipitation is invisible during the extraction process. The precipitation location can be marked before centrifugation to facilitate subsequent experiments.
- It is recommended to remove the residual EPS-U after centrifugation, otherwise it may affect the Western Blotting.
- If the extracted exosomes are subsequently applied to Western Blot or qPCR, it is recommended to directly use the lysis buffer to lyse the exosomes precipitation after the end of step 4. The extracted exosomes can be aliquoted and stored at -80°C to avoid repeated freezing and thawing.
- If the follow-up application involves the detection of morphological structure such as activity, particle size or integrity after the exosomes are extracted, the freshly extracted exosomes should be used as soon as possible. The exosomes mentioned are recommended to be filtered with a $0.45\ \mu\text{m}$ filter and stored at $2-8^{\circ}\text{C}$, and tested within 24 hours.

FOR RESEARCH USE ONLY