

ExoFast™ Exosome Isolation Reagent from urine

Catalog Number	Amount	Shipping Condition	Storage Condition
E055	10 mL	Room temperature	2~8°C for one year

Product Description

Exosomes are small vesicles (30–120 nm) containing protein and RNA that are secreted by various types of cells in culture, and found in abundance in body fluids including blood, saliva, urine, and breast milk. Exosomes are thought to function as intercellular messengers, signaling macromolecules between specific cells, however, their formation, and biological pathways in which they are involved remain incompletely understood.

The biological study of exosome function and trafficking requires the isolation of intact exosomes, but the current methods used are tedious, non-specific, and difficult. The ExoFast™ Exosome Isolation Reagent from urine provides a simple and reliable method of concentrating intact exosomes from urine samples. By tying up water molecules, the ExoFast™ Exosome Isolation Reagent forces less-soluble components (i.e. exosomes) out of solution, allowing them to be collected after brief, low-speed centrifugation.

Protocol

1. Remove the urine sample from storage and place it on ice. If the sample is frozen, thaw the sample in a 25°C to 37°C water bath until it is completely liquid, and place on ice until needed.
 2. Centrifuge the urine sample at 3000 × g for 15 minutes at 4°C to remove cells and debris.
 3. Transfer the supernatant containing the clarified urine to a new tube without disturbing the pellet.
 4. Add 1 volume of the ExoFast™ Exosome Isolation Reagent to the clarified urine. For example, for 5 mL of urine sample, add 5 mL of the ExoFast™ Exosome Isolation Reagent.
 5. Mix the urine/reagent mixture well by inverting or vortexing until there is a homogenous solution, and incubate at room temperature for 1 hour.
 6. After incubation, centrifuge the samples at 10,000 × g for 1 hour at 4°C.
 7. Aspirate and discard the supernatant. Exosomes are contained in a beige or white pellet at the bottom of the tube (not visible in most cases).
 8. (Optional) Centrifuge the sample at 10,000 × g for 5 minutes to collect any residual reagent.
 9. Discard any residual supernatant by careful aspiration with a pipette.
 10. Resuspend the pellet in a convenient volume of 1X PBS or similar buffer.
 11. Once the pellet is resuspended, the exosomes are ready for downstream analysis or further purification through affinity methods.
- Keep isolated exosomes at 2~8°C for up to 1 week, or at -20°C for long-term storage.