

T-Pro Total Exosome Isolation Reagent (for urine)

Store at 2°C ~ 8°C

(JO66-V003S) 100 ml
(JO66-V003M) 500 ml



This product is for laboratory research ONLY and not for diagnostic use.

Description	Exosomes are small vesicles (30–120 nm) containing RNA and protein 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, delivering their cargo of effector or signaling macromolecules between specific cells, however, their formation, the makeup of the cargo, 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.
Contents	T-Pro Total Exosome Isolation reagent (from urine) contains reagents sufficient for processing 200~1000 mL of urine.
Storage	T-Pro Total Exosomes Isolation Reagent is stable for 2°C ~ 8°C

Instructions

Prepare Sample

- 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 2000 × g for 30 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.

Isolate Exosomes

- 1 Transfer the required volume of clarified urine to a new tube and add 0.5 volumes of the T-Pro Total Exosome Isolation reagent (from urine). Examples are shown in the following table:

Urine	Reagent
1 ml	500 µl
10 ml	5 ml

- 2 Mix the urine/reagent mixture well either by inverting the tube, vortexing, or pipetting up and down until there is a homogenous solution.
- 3 Incubate samples at 2°C to 8°C overnight
- 4 After incubation, centrifuge the samples at 10,000 × g for 1 hour at 2°C to 8°C.
- 5 Aspirate and discard the supernatant. Exosomes are contained in the pellet at the bottom of the tube (not visible in most cases).
- 6 Resuspend the pellet in a convenient volume of 1X PBS or similar buffer.

Starting Urine Volume	Resuspension Volume
1 ml	25 – 100 µl
10 ml	100 µl – 1 ml

- 7 Once the pellet is resuspended, the exosomes are ready for downstream analysis or further purification through affinity methods.

*Keep isolated exosomes at 2°C to 8°C for up to 1 week, or at -20°C for long-term storage.