

# Total Exosome Isolation Kit (from Cell Culture Media)

Catalog # E101 Store at +4°C Manual Revision Date 1/15/2023

## Product Usage

This product is ONLY intended for research use. Not for human or animal therapeutic or diagnostic use.

# Kit Components

Kit Components	Catalog #/ Size		Storage Temperature
	E101-01	E101-02	
Total Exosome Isolation Kit (Cell Culture Media)	50 ml	250 ml	+4°C
ExoSafe™ Buffer	2 ml	10 ml	+4°C

#### **Product Overview**

Exosomes are present in almost all biological fluids. Currently, the isolation of high-quality exosomes from various types of samples is still challenging. While differential ultracentrifugation is widely used for the isolation of exosomes, it requires the use of special equipment with several drawbacks such as its time-consuming operation and unable to process a large volume of samples. **Exom Biopharma** also provides an array of total exosome isolation products that can help you to enrich and purify high-quality, intact exosomes from a variety of biological fluids, including cell culture media, serum, plasma, urine, saliva, milk, and plants. The total exosome isolation products are not only simple, fast, and easy for use, but also can clean up exogenous nucleic acid contaminations and stabilize exosomes for downstream biomarker analysis and drug delivery application.

## Advantages of our Kits

- a. High purity and yields
- b. Minimum hand-on time
- c. Quick and easy protocol

## **Applications**

a. Cell culture treatment, WB, RT-and RT-PCR applications

#### General Guidelines

- a. Do not grow cells in normal fetal bovine serum because the serum will contain its own exosomes. The cells should be grown in either serum free media or exosome depleted fetal bovine serum (ExoMinus FBS Catalog # F1023)
- b. Do not use PBS or any other media for exosome storage. Our ExoSafe™ buffer contains stabilizing chemicals for long term storage of the exosomes.
- c. Store isolated exosomes at -20°C or -80°C for long term storage.

# Protocol

- 1. Harvest cells by centrifugation at 3,000xg for 10 minutes and transfer supernatant containing exosomes in a fresh tube
- 2. Centrifuge supernatant from the cell culture media again at 10,000x g for 20 minutes.
- 3. Transfer supernatant to a fresh tube. Discard the pellet.
- 4. In a new tube and add Total Exosome Isolation Reagents (from cell culture media) reagents as follows:

Culture Media	ExoPrep™ Reagent	
1 ml	0.5 ml	
5 ml	2.5 ml	
50 ml	25 ml	



- 5. Invert tube several times or vortex to mix the contents well.
- 6. Incubate the contents at 2-8°C for 2 hours or for maximum yield incubate the mixture overnight.
- 7. To collect the exosome, centrifuge the tubes at 10,000x g for 30 minutes at 2-8°C.
- 8. Aspirate or discard supernatant. Exosomes will be visible as solid pellet in the bottom of the tube.
- 9. To completely remove the precipitation reagent, centrifuge the tube again for 2 minutes at 10,000xg. Carefully remove and discard the liquid and save the pellet.
- 10. Resuspend exosome pellet in ExoSafe™ buffer (200 µl for 1 ml Cell Culture or 500 µl for 5 ml cell culture supernatant)
- 11. Store purified exosomes at -20°C.

#### **Related Products**

Total Exosome Isolation Kit (from serum)	E103
Total Exosome Isolation Kit (from plasma)	E105
Total Exosome Isolation Kit (from saliva)	E108
Total Exosome Isolation Kit (from urine)	E1010
Trimix Exosome RNA Isolation Kit	E1016
Total Exosome Protein Isolation Kit	E1017
Total Exosome RNA and Protein Isolation Kit	E1015
ExoClean – Exosome Desalting Columns	E1013
Exosome Direct RT-PCR Kit	E1020

#### **Exosome Related Custom Services**

We offer the following exosome related custom services:

- a. Grow cells from 100 ml to 100 Liters
- b. Isolate exosome by TFF, ultracentrifugation, and density gradient centrifugation
- c. Exosome characterization by NTA, western blot, RT-PCR and TEM
- d. Endotoxin testing by LAL

## Contact Us

For any questions or further information, please contact our customer service @:

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