Product description

Exosome solation Kit provides a rapid method for the isolation and purification of exosomes from biological fluids. Exosomes are subgroup of extracellular vesicles (EVs) with endocytic origin and diameter of 30-120 nm. Many cell types such as stem cells tumor cell and immune cell, have been reported to secrete exosomes into the extracellular environment. Their proposed role as intercellular messenger together with their stability as carrier of proteins and RNA makes them ideal in the search for biomarkers for a variety of biological questions.

Advantage of EXOPURE kit:

1. Exosomes isolated in sterile conditions
2. Obtained high yield of exosome with Low volume of cell culture media
3. Less time and Low speed centrifuges is required

Kit Components

1. Reagent A
2. Reagent B

Notes prior to use

1. Vortex and heat the Reagent A to 37°C and mix until the crystals disappear prior to use.
2. Before getting started please ensure that the centrifuge is run at room temperature.
3. Thaw the samples on ice or at 4°C.

Additional required material

Centrifuge, Pipette (+ RNase free tips), Vortexer / multi-vial vortex shaker, Refrigerator

Storage and product stability

All reagents should be kept tightly sealed and stored protected from light at 2-8°C. These reagents is stable at least 6 months in their unopened containers. Vortex and heat the Reagent A to 37°C and mix until the crystals disappear prior to use.

Recomended starting volume

Culture media samples 4 mL

Exosome isolation protocol

*Spin sample for 20 minutes at 3,000 xRPMto remove particles and debris
*Heat the Reagent A to 37°C for 20 minutes
*Add sample and reagent A Transfer supernatant into a new 15 mL conical tube.at ratio 4:1 (sample 4ml: reagent A 1ml)
*Vortex tube for 5 min to mix thoroughly
*The solution should have a cloudy appearance
*Incubate overnight at 4°C (for better result shake the tube every 1 hours)
*Vortex tube for 1 min to mix thoroughly
*Spin for 45 minutes at 4,000 x RPM at 4°C
*Remove supernatant completely and discard
*Resuspendplate of exosome with 50-200 microliter of Reagent B
The purified exosome sample may be stored at 4°C for a few days or could be stored at -20°C or -80°C for long time

Tips and Troubleshooting

1. No pellet visible:
Some biological fluids will only give relatively faint, sometimes invisible pellet. The lack of a clearly visible pellet does not mean a failure in your procedure. Please make sure that sample has been added and that the incubation time at 4°C has been kept for overnight.
2. Crystal formation in buffers:
In case you observe crystal formation in one of the buffers briefly heat the Reagent A to 45°C and mix until the crystals disappear.
3. **Plasma contains high levels of clotting factors** that will co-precipitate with the exosomes and result in a large pellet that is difficult to resuspend**.**

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