Exosome Isolation Kit (SEC) (2mL)

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Product Overview

This product is an exosome isolation kit based on the principle of Size Exclusion Chromatography (SEC), which is a method of separating particles in solution based on particle size. The column is filled with stable and porous gel particles. When a solution containing exosomes is added to an SEC column, smaller particles are trapped in the pores, while larger molecules do not enter the pores and are eluted first. As a result, the different stages of the elution fraction will contain molecules of different sizes, starting with the larger exosome particles, followed by the smaller protein and lipid particles. This kit is more suitable for subsequent functional verification, characterization, and content detection of exosomes (nucleic acid, protein, lipid, and metabolite detection or omics analysis).

Component and Storage Conditions

Component	Specifications	Storage Conditions
SEC Columns	2 mL	4℃
Preservation Buffer (5×)	40 mL	4℃
Balanced Buffer (10×)	30 mL	4℃
Cleaning Buffer (10×)	50 mL	4℃

Protocol

1. Open the plunger and empty the Preservation Buffer.
2. The sample loading amount is calculated based on the loading capacity of 10mg small molecule protein that can be adsorbed by 1mL of filler, and the

minimum volume should not be less than 2mL.If the sample is less than 2mL, dilute it to 2mL using Balanced Buffer.

3. Balance once with Balanced Buffer (5 mL) that is 5 times the volume of the filler.
4. Load 2mL of sample, and after the sample has completely entered the filler and flowed out, add 2mL of Balanced Buffer, collect effluent (2 mL).
5. Cleaning in place: After use, clean with 10 column volumes (20 mL) of Cleaning Buffer, and then rinse 2 column volumes with distilled water (4mL), rinse 1 column volume with Preservation Buffer (2mL), fill column with the Preservation Buffer and store at 4 ℃.

Usage: 20 times

Notes and Disclaimer

If the volume of the sample is too large after passing through the column, ultrafiltration concentration can be used to reduce the volume (Milipore ultrafiltration tube, product number: UFC801096).

The Preservation Buffer (5 x), Balanced Buffer (10 x), and Cleaning Buffer (10 x) all need to be diluted to 1 x with deionized water for use.

When using, try to ensure that there is liquid inside the column to ensure that the filler can be fully wetted.
To avoid column blockage, both the buffer and sample must be treated with 0.22 μm filter membrane.

After use, the upper end of the column needs to be sealed with a sealing film to prevent the Preservation Buffer from evaporating.

The different sample volumes and chromatographic columns of different models have different ranges of component collection. Collect 1 component per well using a 96-well plate, and fluorescence intensity tests were performed to analyse the specific collection range of collected components.

This product is only for scientific research by professionals and should not be used for clinical diagnosis or treatment, nor for food or medicine.