Isolation and Preservation of Extracellular Vesicles with EXO-PEG-TR

Tech ID: 33978 / UC Case 2024-9AM-0

BRIEF DESCRIPTION

A groundbreaking method for the efficient isolation and preservation of high-purity small extracellular vesicles (sEVs - exosomes) from biofluids using a novel EXO-PEG-TR reagent.

FULL DESCRIPTION

This technology introduces a novel approach to the isolation and preservation of sEVs including exosomes, from various biofluids. Utilizing a newly developed reagent, EXO-PEG-TR, this method allows for the separation of high-purity sEVs without the need for complex equipment. Designed to overcome the limitations of current sEV isolation techniques, such as ultracentrifugation and precipitation, EXO-PEG-TR simplifies the process, ensuring high yield and quality of sEVs (exosomes) for further diagnostic and therapeutic applications.

SUGGESTED USES

- Diagnostic and therapeutic applications involving small extracellular vesicles.
- Research on intercellular communication and transfer of biological cargo.
- Mapping of exosome genomics, transcriptomics, proteomics, lipidomics, and metabolomics.
- Clinical scalability of precision diagnostics.

ADVANTAGES

- High efficiency and purity isolation of extracellular vesicles.
- Minimal equipment requirement, facilitating easier clinical scalability.
- Preservation of exosome quality and quantity during storage.
- Applicable to a wide range of biofluids and cell culture media.
- Supports downstream "omics" and subpopulation studies.
- Timesaving with a simple three-step isolation process.

PATENT STATUS

Patent Pending

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OTHER INFORMATION

CATEGORIZED AS

- **Biotechnology**
  - Bioinformatics
  - Genomics
  - Proteomics
- **Medical**
  - Diagnostics
  - Research Tools
  - Therapeutics
- **Research Tools**
  - Bioinformatics
  - Reagents

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