CD Bioparticles Launches Exosome Extraction Kits to Support Exosome Research

CD Bioparticles recently announced the availability of its new line of Exosome Extraction Kits.

NEW YORK, NY, UNITED STATES, February 22, 2025 /EINPresswire.com/ -- CD Bioparticles, a leading manufacturer and supplier of numerous drug delivery products and services, recently announced the availability of its new line of Exosome Extraction Kits, which utilize different separation principles to efficiently extract exosomes from complex samples, providing high-purity and high-quality samples for subsequent exosome research.

Exosomes are small vesicles (30-150 nm) containing RNA and proteins that are secreted by cells. They are found in large quantities in body fluids such as blood, saliva, urine and breast milk. Exosomes are thought to act as intercellular messengers, delivering their effectors or signalling molecules between specific cells. However, the structure of exosomes, their effector composition and the biological pathways in which they participate are currently unknown.

The biological function of exosomes requires the isolation of intact exosome particles. Traditional ultracentrifugation methods are cumbersome and difficult to use with high hardware requirements. CD Bioparticles' Exosome Extraction Kits use optimized components for the extraction of exosomes from cell culture supernatants. Combined with the purification and filtration device, high purity exosome particles can be obtained quickly and efficiently, which can be used for electron microscopy, NTA particle size analysis, nucleic acid analysis, protein analysis, cytological experiments, animal experiments, etc.

For example, the Exosome Secondary Purification Kit (Catalogue: CDE24-085-L) is suitable for further purification of exosomes after post-maturation modification (fluorescence staining, antibody labelling, loading of small molecules, large molecule biocouplers, etc.) or further purification of exosomes obtained by other methods. This kit integrates the molecular SEC principle and multi-mode adsorption function for exosome isolation and secondary purification, which has the advantages of high purity, high recovery, high efficiency in removing impurities, high reproducibility, good exosome integrity, simple operation and low equipment requirements. Separation and purification of exosomes can be completed within 40 minutes. The quality of extracted exosomes is stable and reliable, with low protein contamination, and can be used in downstream biological experiments such as protein extraction and analysis, RNA extraction and analysis, and cell function detection.

Another is the ExoLoad-Exosomal RNA Loading Kit (Catalog:CDE24-090-L). It is a rapid, high-throughput, high-precision product for the concentration of cell supernatant samples, which are concentrated for molecular size exclusion chromatography (SEC) separation. This kit is designed to efficiently introduce small nucleic acids such as siRNA, microRNA and ASO into exosomes through the custom development of an exclusive transit peptide ETP (Exosome Transit Peptide) for exosomes, which can easily and quickly achieve efficient loading of exosomal small nucleic acids, and is used for functional and pharmacological studies of small nucleic acid delivery. It requires only two steps, the whole process takes 3 hours and the uptime is 15 minutes, which is comparable to the performance of electroporation.

For more information about CD Bioparticles' Exosome Extraction Kits and other products, please visit https://www.cd-bioparticles.net/exosome-extraction-kits.

About CD Bioparticles

CD Bioparticles is an established drug delivery company that provides customized solutions for developing and manufacturing novel biocompatible drug delivery systems. It specializes in various formulation and drug delivery technologies, from conventional liposomes and PEGylated liposomes to polymer microspheres and nanoparticles for drug delivery. The company also provides contract research services for drug delivery formulation, formulation feasibility study, process development and scale-up, as well as analytical and non-clinical research services.

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