

# Extracellular Vesicles

Extracellular vesicles (EVs) have only recently been recognized for their untapped potential as therapeutics and biomarkers. EVs are shed by almost all cell types and play an important role in cell-cell communication, having been identified to shuttle mRNA and miRNAs. The sheer variety of EVs presents numerous avenues for research and development. Despite the expansion of research, isolating EVs in a way that keeps vesicles and their cargo intact remains a challenge. Developing an isolation and analysis workflow for your specific needs is a challenge when using one-size-fits-all solutions. With a flexible and customizable centrifugation-based workflow, we can accelerate answers and develop the potential for your desired EV species.

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## CELL CULTURE

Cultivate productive sources of extracellular vesicles with automated cell culture, viability measurements, and media analysis.

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## SEPARATION FROM CELLS, MEDIA

Efficiently refine culture supernatant and separate desirable microparticles from debris and large particulates.

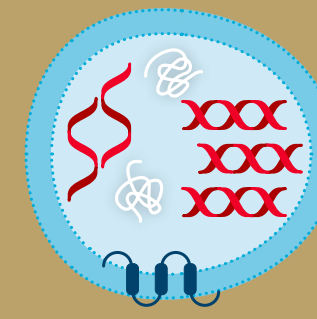
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## PURIFICATION

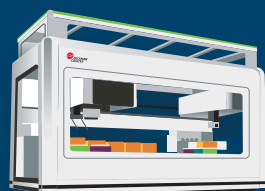
Flexibly purify the desired size and density of extracellular vesicle from a heterogeneous sample. Customizable protocols can be fit to your specific needs.

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## VESICLE ANALYSIS

Discover the potential of your purified extracellular vesicles: perform small particle analyses to study physical characteristics, and extract RNA to understand vesicle cargo.



① **Biomek i-Series Automated Liquid Handler**



② **Vi-CELL BLU Cell Viability Analyzer**



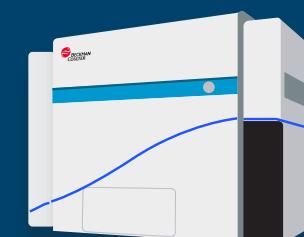
③ **Vi-CELL MetaFLEX Bioanalyzer**



④ **Avanti JXN-30 High Performance Centrifuge**



⑤ **Optima XPN-Series Ultracentrifuge**



⑥ **CytoFLEX S Research Flow Cytometer w/ Violet Side Scatter Module**



⑦ **RNAdvance Extraction Kits**