# **NanoEX**<sup>TM</sup>

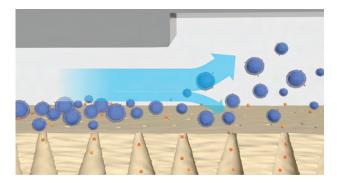
The Ultimate Extracellular Vesicle (EV) Isolation Platform

**NanoEX™** is a next-generation EV/exosome isolation platform that fundmentally resolves all the issues with existing technologies and delivers unparalleled EV isolation efficieny and quality.



# **Groundbreaking Nanotechnology**

- Patented Asymmetric Nanopore Membrane (ANM) technology
- Highly uniform pore size with <10% CV</p>
- Cone-shaped channels to eliminate clogging
- Greatly reduce shear force induced EV loss and protein aggregation



## From Research to Therapeutics

- Fully automated processing
- Simutaneous EV purfication and enrichment
- Process 20-200 ml of materials within 3 hours
- Enclosed single-use cassettes to avoid cross-contamination





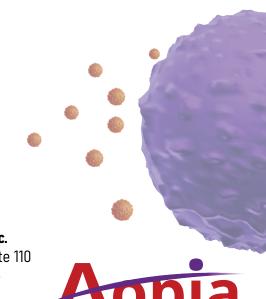








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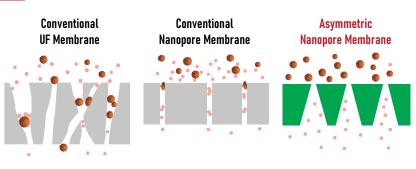




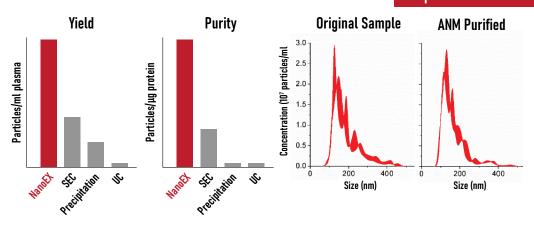
#### **ANM vs Conventional Filtration Membranes**

Conventional Ultrafiltration (UF) Membranes have non-uniform pore size and channels, leading to EV and protein trapping, pore clogging, and EV loss, whereas the cylindrical filtration channels in Convention Nanopore Membranes are highly prone to clogging.

**Asymmetric Nanopore Membranes (ANM)** fundamentally prevent pore clogging thus retain EV while removing free-proteins at unparalleled efficiencies.

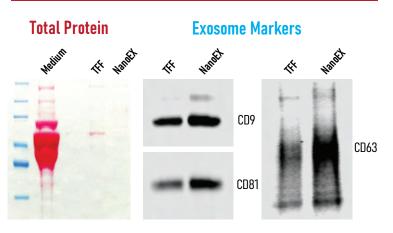


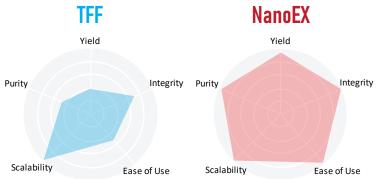
## **Unparalleled Performance**



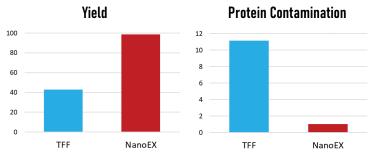
ANM Based Purification not only provides the highest yield and purity among all existing technologies, but also perfectly preserves the integrity of EV due to the gentle process, thereby minimizes the loss of biomarkers and biofunctionalities

## **Next Generation Large-Scale EV Production**





NanoEX<sup>™</sup> is a next-generation large-scale bio-nanoparticle isolation platform to replace conventional angential Flow Filtration (TFF) for therapeutic and cosmetic applications



#### **Versatile Cassette Selection**

	VanoFlow™-EXO-01	VanoFlow™-EXO-02	VanoFlow™-EXO-03
Processing Volume	3-30ml	5-60ml	25-250ml
Enrichment Factor	Up to 6	Up to 12	Up to 17
Particle Size Cutoff	30nm	30nm	30nm
Processing Time*	< 2hr	< 3hr	< 3hr
Application	Small volume research and clincal samples	Medium volume research and clincal samples	Large volume cell culture supernatant

<sup>\*</sup> Based on intermediate processing volume