

ExoQuick® ULTRA & ExoQuick-TC® ULTRA

TAKE YOUR EV ISOLATION TO EXCEPTIONAL LEVELS OF PURITY AND YIELD

SYSTEMBIO.COM/EXOQUICK-ULTRA

HIGHLIGHTS

- **Even cleaner**—reduces carry-over of albumins and immunoglobulins compared to other methods, including ultracentrifugation and competitors' kits
- **Higher yields**—isolate more EVs per normalized input volume than ultracentrifugation and competitors' kits
- **Better biomarker detection**—see what you've been missing when you increase the sensitivity of EV biomarker detection
- **Fast**—requires less than 20-minutes of hands-on time
- **Cost-effective**—save money with each reaction compared to how much you'll spend using a competitor's kit

Streamline your EV preps even more by turning to SBI's Exosome Services, your reliable source for purified EVs. Learn more at systembio.com/services.

ExoQuick® gets even better

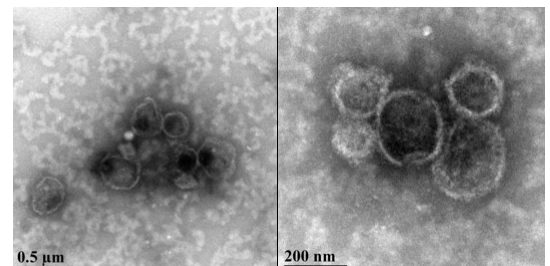
Drawing upon years of exosome experience, the SBI team has pushed ExoQuick extracellular vesicle (EV) isolation technology to new peaks of performance with ExoQuick® ULTRA for Serum & Plasma and ExoQuick-TC® ULTRA for Tissue Culture Media and other biofluids. While many EV isolation methods require you to choose between high yields, easy protocols, clean preps, and low costs, ExoQuick ULTRA and ExoQuick-TC ULTRA are able to deliver on all these fronts for trade-off free EV preparation.

Important for intercellular communication in both normal physiology as well as disease states such as cancer, EV biology is a rapidly growing field. However, obtaining EVs for *in vivo* and *ex vivo* studies can be challenging. Ultracentrifugation has been considered the gold standard for exosome isolation, but the method is time-consuming, requires large sample volume inputs and requires access to specialized equipment. Additionally, UC doesn't isolate the cleanest exosome preparations it once was thought to produce. Other commercial kit methods are faster and easier than ultracentrifugation, but still include carryover protein that can cause over-estimation of EV amount and that can interfere with protein-sensitive studies such as mass spectrometry.

Fortunately, with ExoQuick ULTRA and ExoQuick-TC ULTRA you can get high yields of EVs that are also highly pure using basic equipment most labs have and with only 20-minutes of hands-on time. From as little as 250 μ L of serum or plasma or 5 mL of tissue culture media or other biofluid, you can get high quality EVs for a wide range of downstream applications such as western blotting, mass spectrometry, NGS sequencing, exosome labeling, and *in vivo/ex vivo* exosome delivery.

Figure 1. EVs isolated using ExoQuick ULTRA display typical EV morphology.

Transmission electron micrographs of EVs isolated from human serum using ExoQuick. The same sample is shown at two different magnifications. Multiple vesicles with typical EV morphology can be seen in each image.



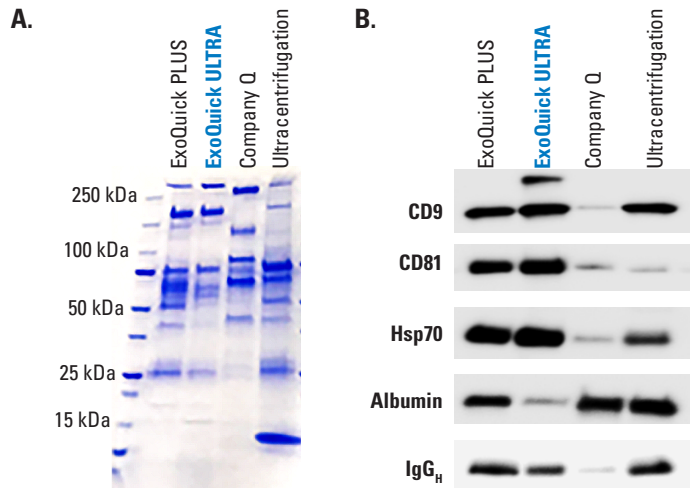
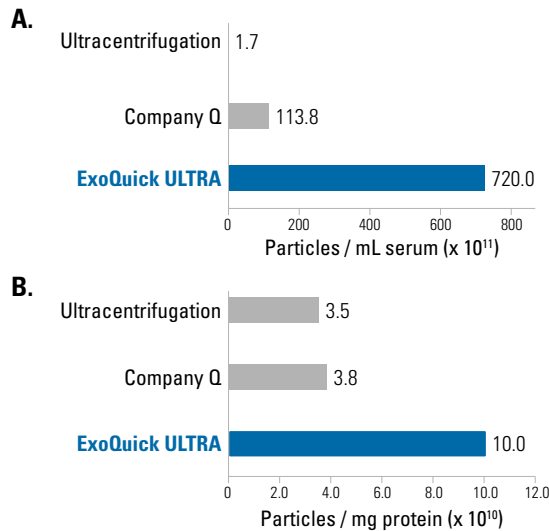


Figure 2. ExoQuick ULTRA delivers high yields of clean exosomes.

(A) A coomassie blue-stained protein gel comparing the protein content of exosome preps isolated using different methods shows only a few, defined protein bands in the ExoQuick ULTRA lane compared to the other methods. (B) Western blotting of the gel shows that the ExoQuick ULTRA prep contains the highest levels of exosome-specific markers CD9, CD81, and Hsp70 and the lowest levels of the carryover proteins albumin and IgG_H. In contrast, the prep from Company Q appears to be primarily albumin, and even the sample prepared using ultracentrifugation contains considerably higher levels of both albumin and IgG_H. Each lane was loaded with 7 μg of total protein as measured using a fluorometric Qubit protein assay.

Figure 3. Fluorescent nanoparticle tracking analysis (fNTA) demonstrates the high EV yields delivered by ExoQuick ULTRA.

Comparison of different isolation methods on EV yields by both volume of input serum (per mL, A) and amount of input serum protein (per mg as measured by fluorometric Qubit protein assay, B). Particle number was measured using fNTA, a technique which specifically detects EVs (learn more about using fNTA to measure EV concentration at systembio.com/ExoGlow-NTA).



Building the tools that speed your research

With an eye on the latest advances, SBI finds promising technology and converts it into easy-to-use tools accessible to any researcher. Our growing exosome product portfolio is just one example. See what other ways SBI can drive your research forward—visit us at systembio.com.

The ExoQuick ULTRA Workflow

