



# ExoQuick-TC™ Exosome precipitation

Optimized one-step solution for rapidly isolating exosomes from tissue culture media and urine for biomarker analysis

Exosomes are 60 –120 nm membrane vesicles secreted by most cell types *in vivo* and *in vitro*. Exosomes are found in blood, urine, amniotic fluid, malignant ascite fluid, tissue culture media and contain distinct subsets of microRNAs and proteins depending upon the cell-type from which they are secreted. SBI's ExoQuick-TC exosome precipitation reagent is a special polymer formulation distinct from the original ExoQuick reagent for serum. ExoQuick-TC has been optimized for exosome isolation from media and urine samples. This technology makes microRNA and protein biomarker discoveries simple, reliable and quantitative.

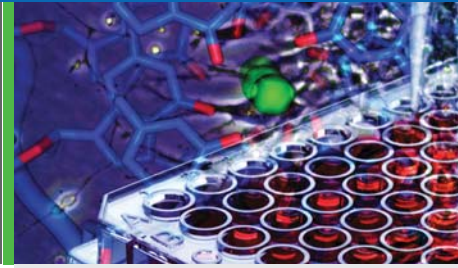
## Isolate exosomes with ease

- No time-consuming ultracentrifugation
- Less expensive than costly DynaBeads
- More effective than any other method
- Use as little as 5ml of cell culture media or urine

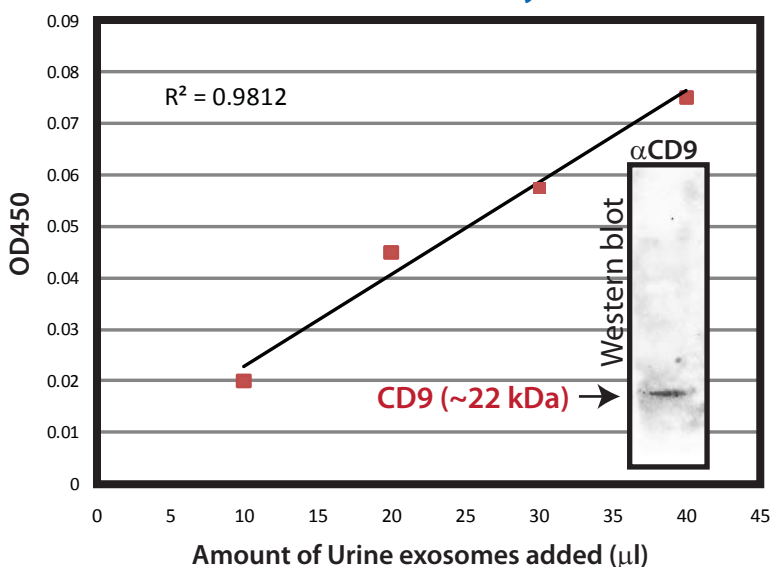
**Time saving, cost-effective  
solution for studying  
exosomes from culture media**

## Highlights

- Precipitate exosomes from cell culture media or urine samples easily
- Exosomes are released from tumors in high abundance
- Exosome cargo reflects the origin and physiological state of the source cells
- MicroRNAs are found in high abundance in circulating exosomes
- Discover novel disease-specific biomarkers



## ExoQuick-TC Urine Exosomes CD9 ELISA Assay



## ExoQuick-TC precipitates urine exosomes

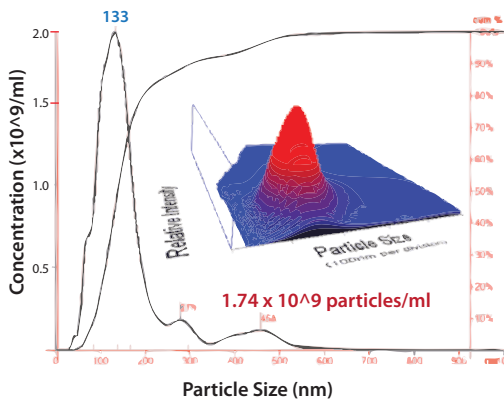
Ten milliliters of normal human urine was combined with 2ml ExoQuick-TC to precipitate urine exosomes. The exosome pellet was resuspended 175µl buffer and increasing amounts of the exosome suspension was loaded onto an ELISA-ready plate. The CD9 protein was detected using SBI's rabbit anti-CD9 primary antibody and SBI's HRP-conjugated secondary goat anti-rabbit antibody. The size of urine CD9 proteins was determined using Western blot analysis with the same set of antibodies (see inset).



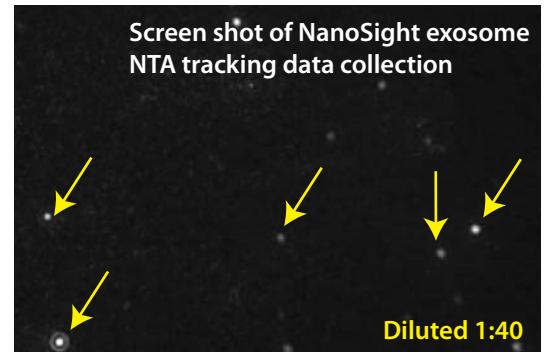
# ExoQuick-TC™ Exosome precipitation solution

## NanoSight Analyses on Exosomes from Tissue Culture Media and Urine

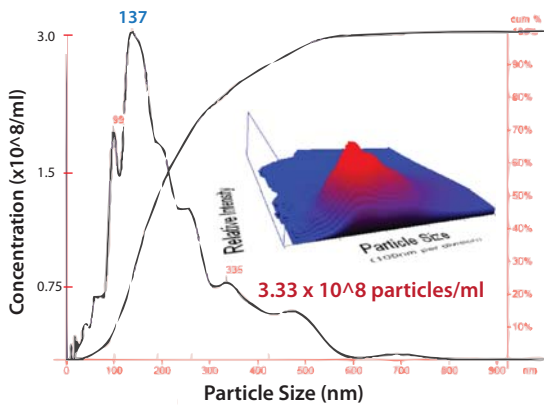
### Media from HT1080 cells



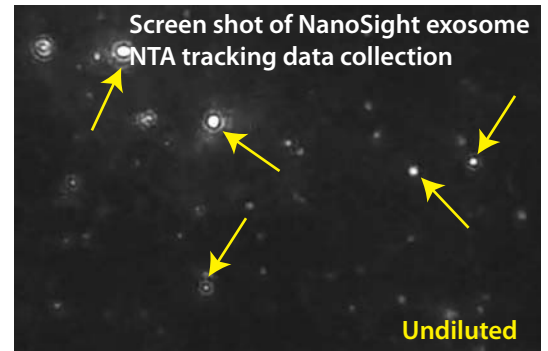
Human HT1080 lung sarcoma cell line was cultured in conditioned media (serum-free) for 72 hours. Ten milliliters of the media was combined with 2ml ExoQuick-TC to pellet the exosomes overnight. The exosome pellet was resuspended in 1ml PBS, diluted 1:40 and visualized on the NanoSight LM10 instrument. The analysis shows that ExoQuick isolated 133nm exosomes with a recovery of 1.74 x 10<sup>9</sup> particles/ml.



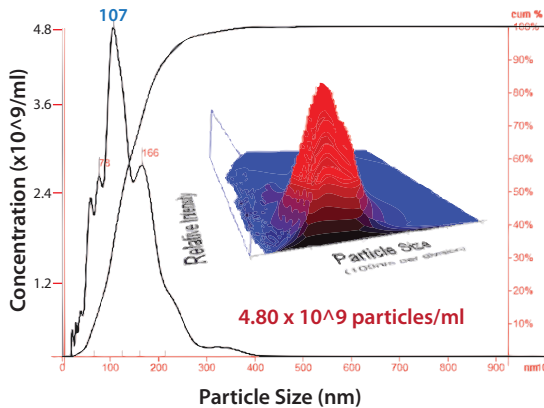
### Media from HEK293 cells



Human embryonic kidney (HEK) cell line was cultured in conditioned media (serum-free) for 72 hours. Ten milliliters of the media was combined with 2ml ExoQuick-TC to pellet the exosomes overnight. The exosome pellet was resuspended in 1ml PBS and visualized on the NanoSight LM10 instrument undiluted. The analysis shows that ExoQuick isolated 137nm exosomes with a recovery of 3.33 x 10<sup>8</sup> particles/ml.



### Human Urine



A Normal human urine sample was used. Five milliliters was combined with 2.5ml ExoQuick-TC to pellet the exosomes overnight. The exosome pellet was resuspended in 1ml PBS, diluted 1:50 and visualized on the NanoSight LM10 instrument. The analysis shows that ExoQuick isolated 107nm exosomes with a recovery of 4.80 x 10<sup>9</sup> particles/ml.

