

SeraMir™ Exosome RNA Amplification

Purify and amplify serum exosomal RNAs for robust microRNA and noncoding RNA biomarker discoveries

RNAs present in patient body fluids are a rich and untapped source of disease-related biomarkers. The RNAs are stable in serum because they are encapsulated in circulating exosomes. Exosomes are 40–100 nm membrane vesicles secreted by most cell types *in vivo* and *in vitro*. Exosomes are found in blood, urine, amniotic fluid, malignant ascite fluids and contain distinct subsets of microRNAs depending upon the tumor or tissue from which they are secreted. The SeraMir kit includes everything needed to accurately and sensitively measure RNAs from serum samples. Exosomes are efficiently isolated using SBI's ExoQuick solution, and the exoRNAs are purified using a phenol-free lysis buffer and rapid spin columns. The SeraMir kit enables the 3' tailing and simultaneous tagging of both 5' and 3' ends during cDNA synthesis - ready for qPCR. Primers for PCR amplification are included for highly sensitive applications.

Isolate exosomes in one step - Easily purify the Exosome RNAs

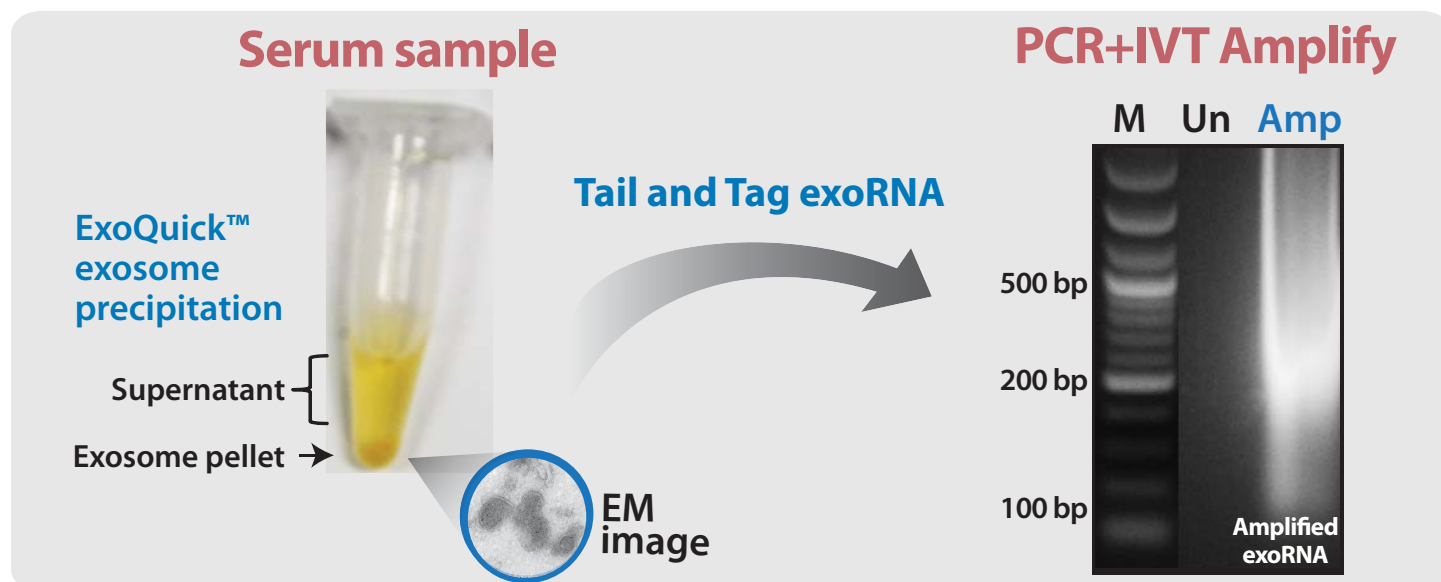
- **Reduce variability** - isolate exosomes first with ExoQuick
- **Increase sensitivity** - amplify exoRNAs for qPCR
- **Gain more data** - use T7 IVT amplified sense exoRNAs for microarrays and NextGen sequencing



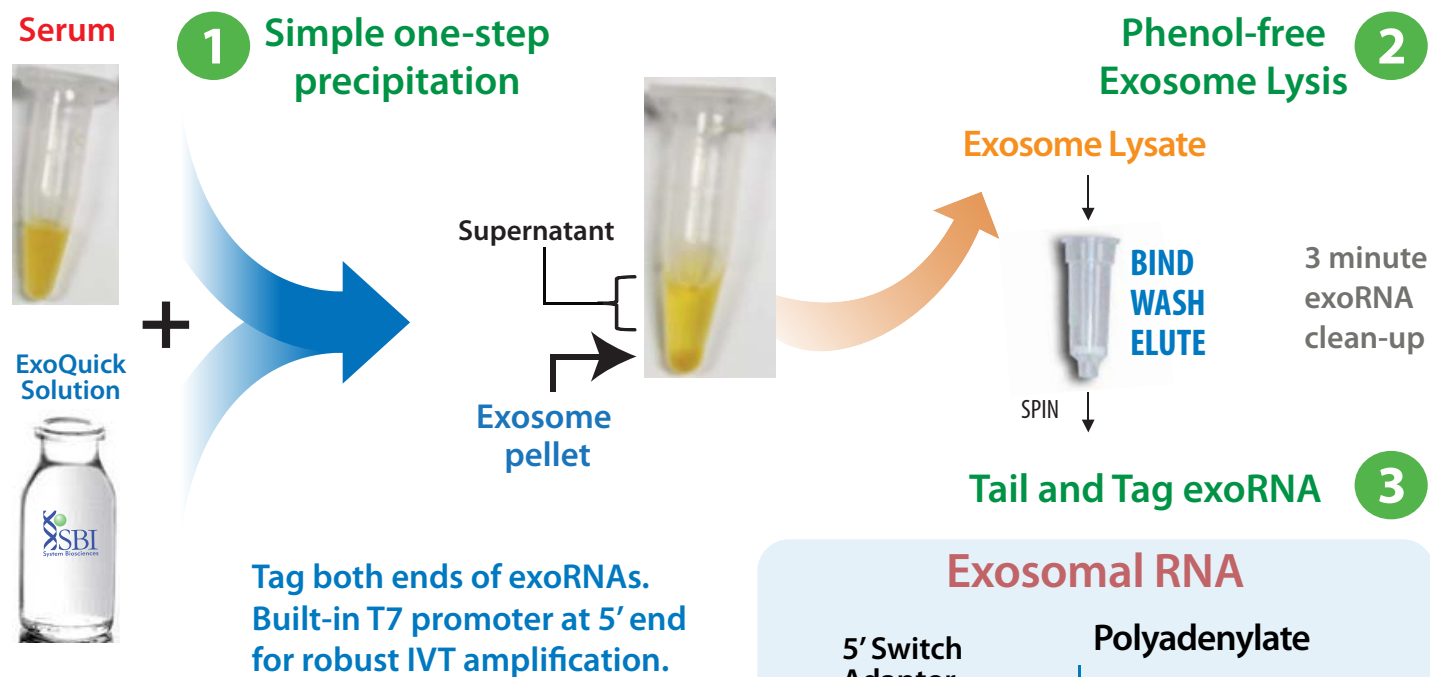
Highlights

- Exosomes are released from tumors in high abundance into the circulation
- Exosome cargo reflects the origin and physiological state of the source cells
- RNAs and MicroRNAs are found in high abundance in circulating exosomes
- Precipitate exosomes from patient biofluids easily with ExoQuick
- Purify exoRNAs with SeraMir columns
- Tail and tag all exoRNAs for qPCR, cDNA amplification and T7 IVT
- Amplify exoRNAs for Microarrays and NextGen Sequencing

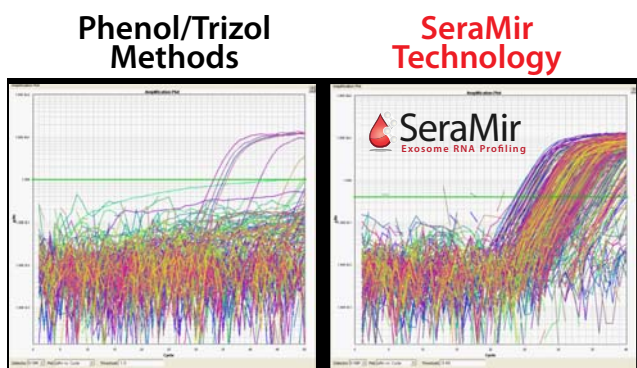
SeraMir
Exosome RNA Amplification



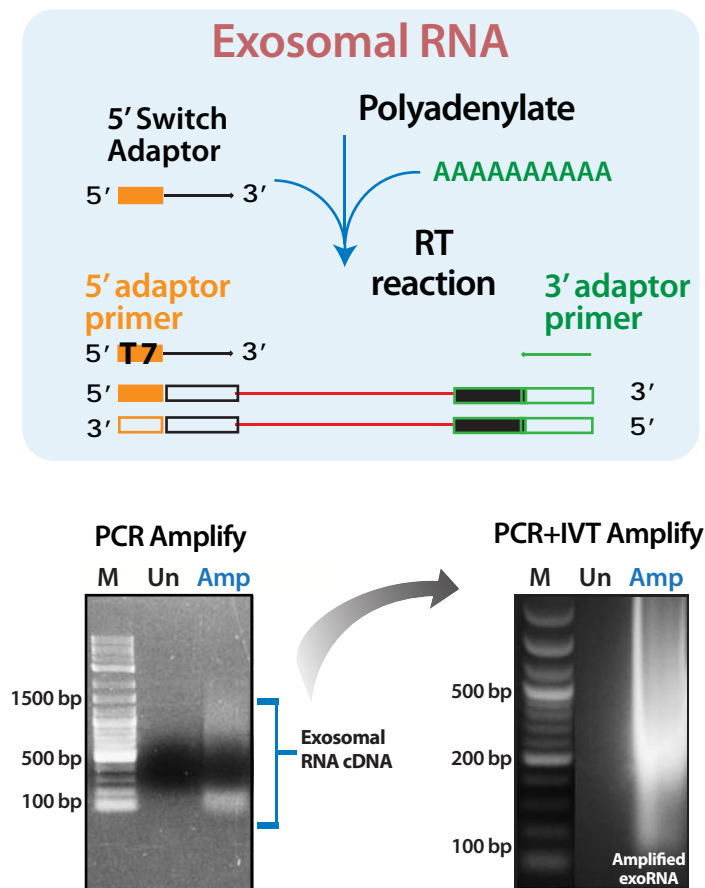
How the Kit Works



4 Perform qPCR profiling on cDNA or use T7 IVT of exoRNAs for Arrays and NGS



Serum RNA prepared by conventional Trizol versus the SeraMir kit. Profiling of 380 Human microRNAs.



We Also Offer Custom Services

System Biosciences offers a wide-range of custom services to support your research, allowing you to spend less time making tools, and more time making discoveries. To learn more, visit our website at www.systembio.com/service or call us at 888-266-5066.