A method for detection of ultra low concentrations of exosomes

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Tumour derived exosomes have a higher concentrations of CD63: huge potential for early cancer detection!



Armstrong, Don, and Derek E. Wildman. "*Extracellular vesicles and the promise of continuous liquid biopsies*." Journal of pathology and translational medicine 52.1 (2018): 1.

Surface Based Immunoassay

Micro Free Flow Electrophoresis









Conclusions



Detection of Ultra-Low Concentrations of Exosomes Possible



Certain exosomes are extremely rich in CD63 protein, as expected



Future work will involve benchmarking results against known characterization techniques, negative controls

Personal Reflections

The Good: Huge potential to apply microfluidics in other fields, extremely interdisciplinary techniques The Bad: Cell derived substances are extremely delicate, long term scalability is a concern The Ugly: Stabbing yourself with syringe tips hurt ☺

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