



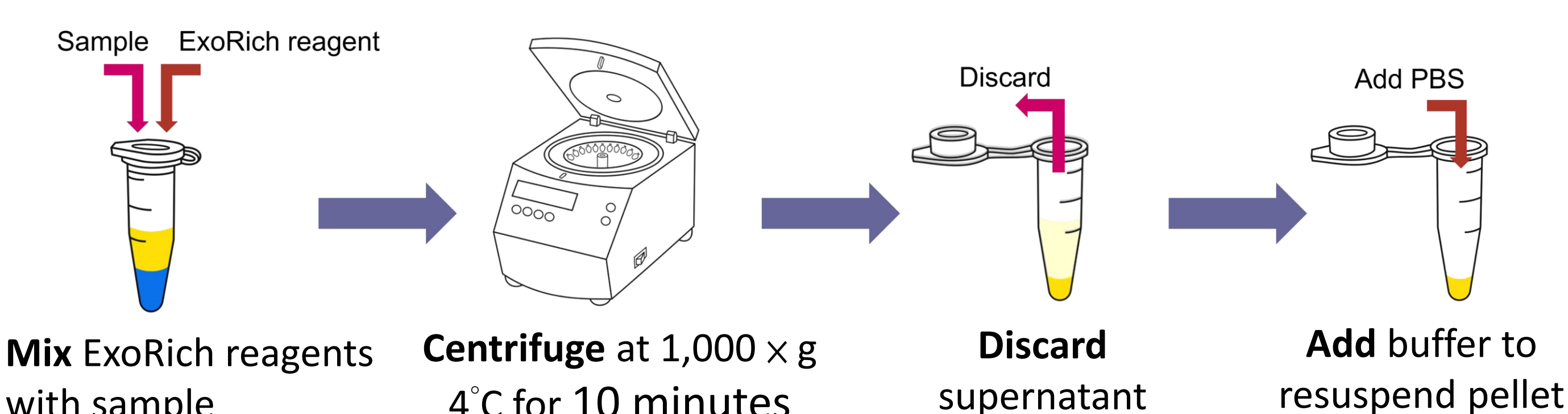
Reliance Biosciences Inc.  
www.reliance-bio.com  
Contact: sales@reliance-bio.com

## Introduction

- Isolation of extracellular vesicles (EV) from plasma have been challenging despite myriads of methods proposed. Ultracentrifugation (UC) and size-exclusion chromatography (SEC) can be time-consuming (over 1 hr) with mixed results. Some polymer-based methods, such as ExoQ (from company S), although very useful, can result in increased viscosity in mixture, leading to uncertainties in repeatability in processing and co-precipitation of contaminants along with target EVs.
- We present an optimized polymer-based approach (ExoRich™, Reliance Biosciences, Inc., Taiwan) enabling high-purity and rapid isolation of EVs from minimal amounts of plasma sample.

## Methods

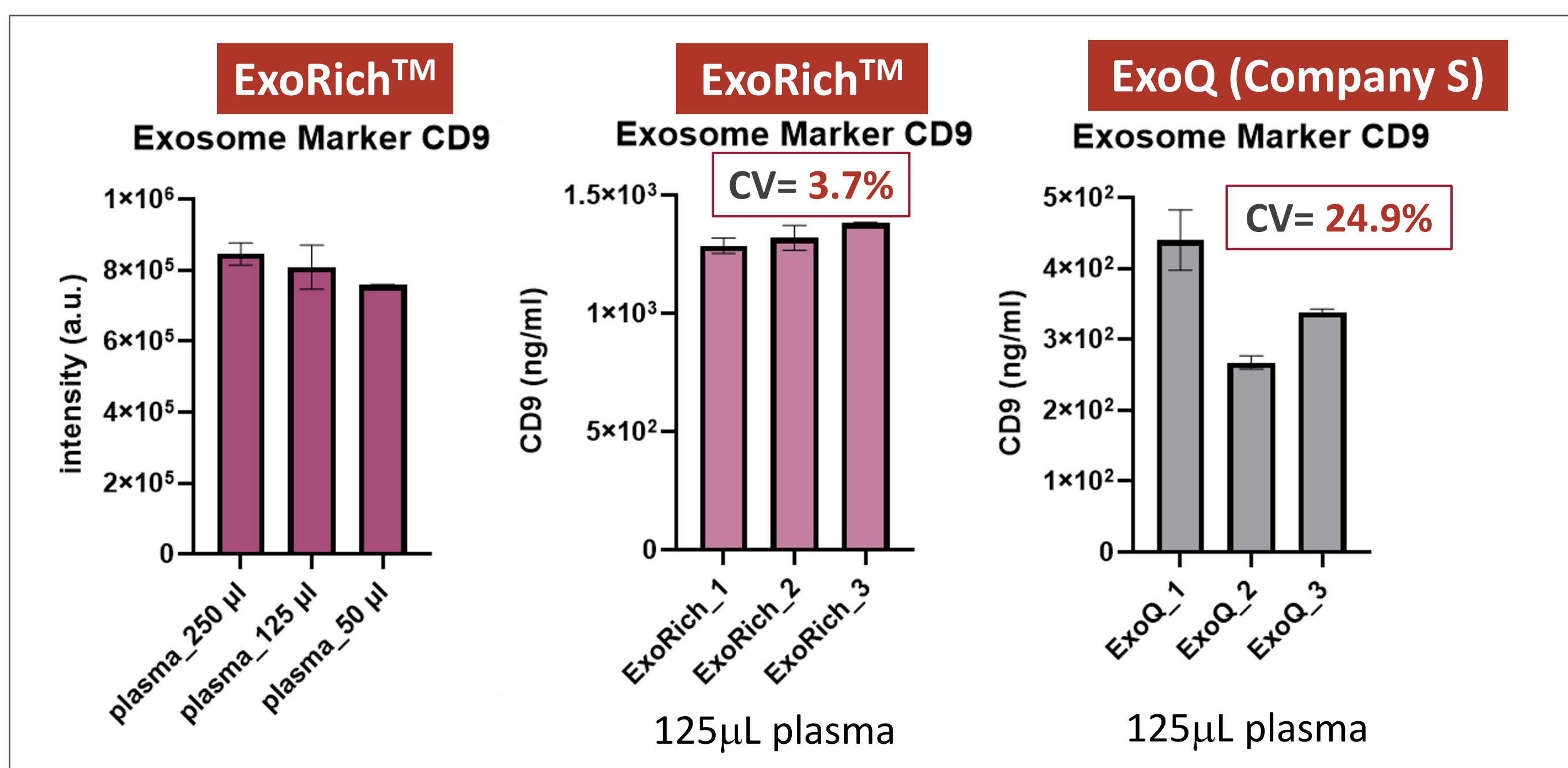
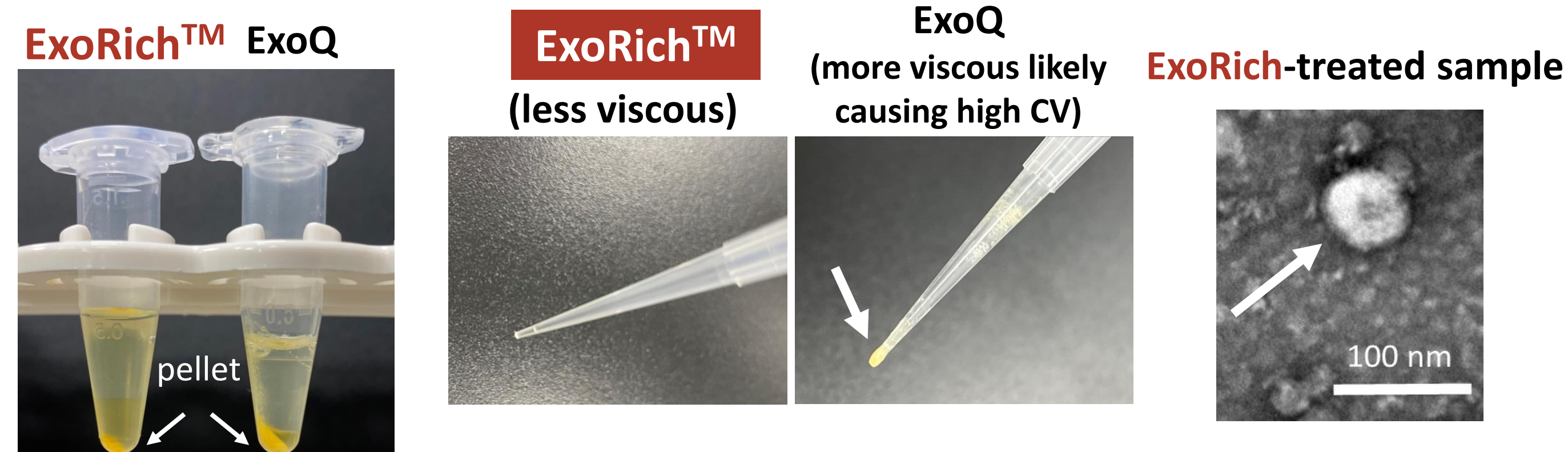
ExoRich™ utilizes an optimized recipe to isolate EV pellet. The protocol requires a single centrifugation for 10 mins.



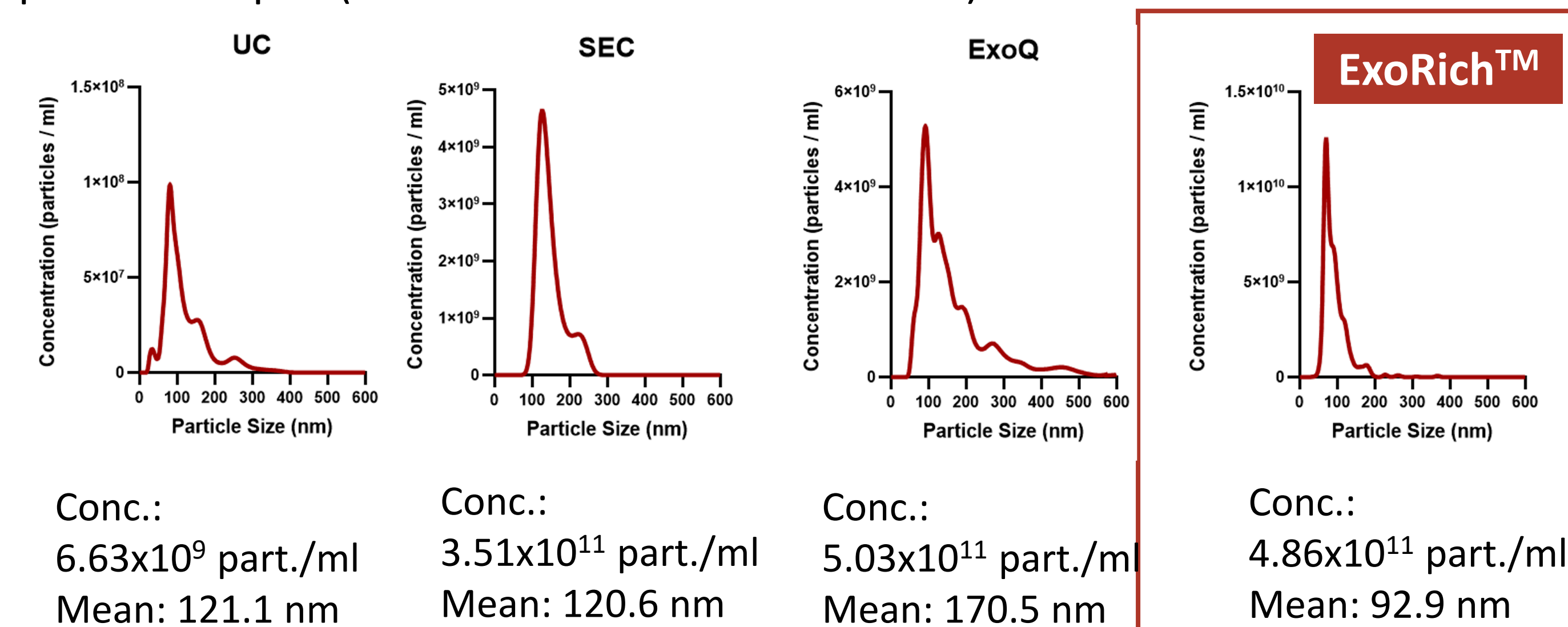
## Results

### EVs characterization from ExoRich-treated plasma

ExoRich™ was added to 3 plasma samples (250µL, 125µL & 50µL). Three repeated ExoRich™ treatments of the same plasma sample (125µL) showed particle variation within 4%.



NTA from UC-treated, SEC-treated, ExoQ-treated, and ExoRich™-treated plasma sample. (NTA: Malvern NS300 was used.)

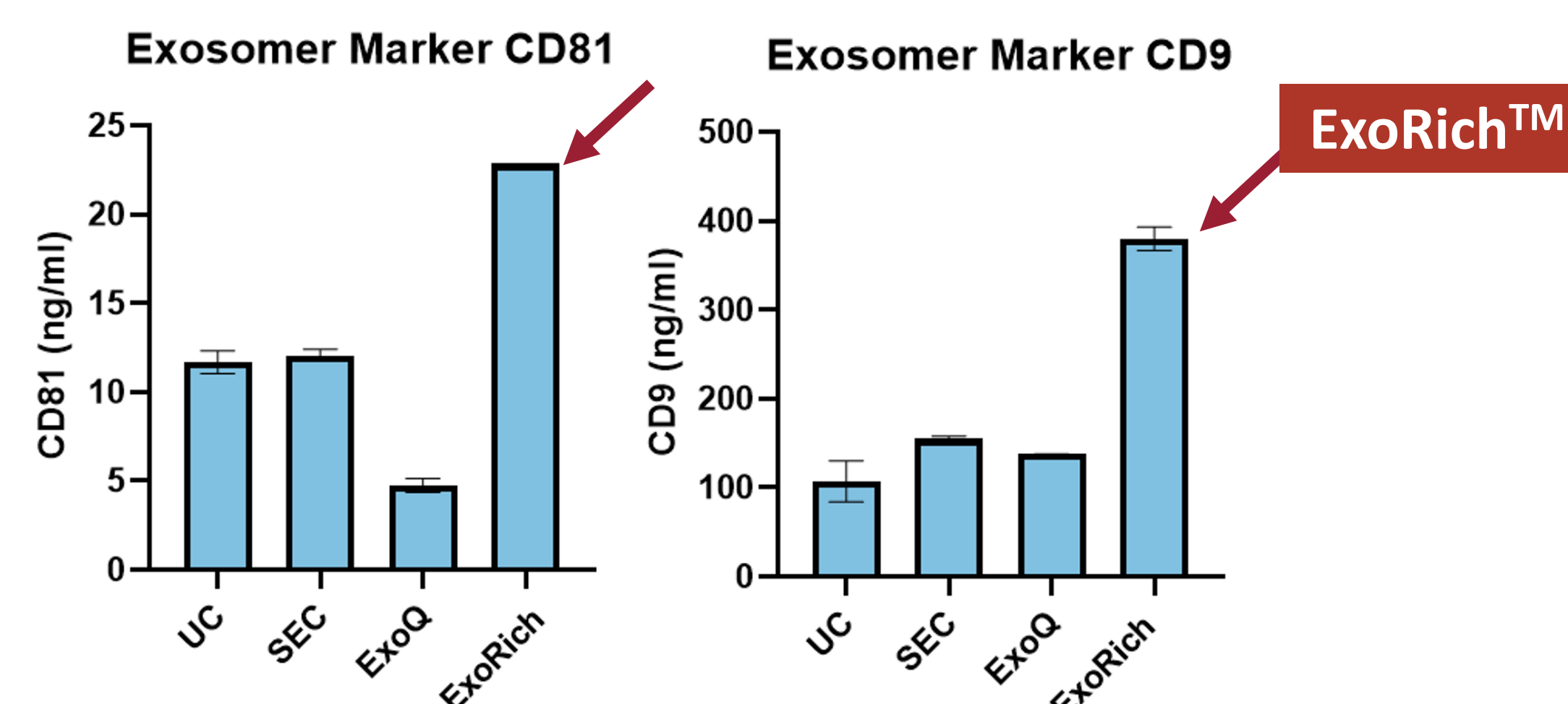


## Results (Continued)

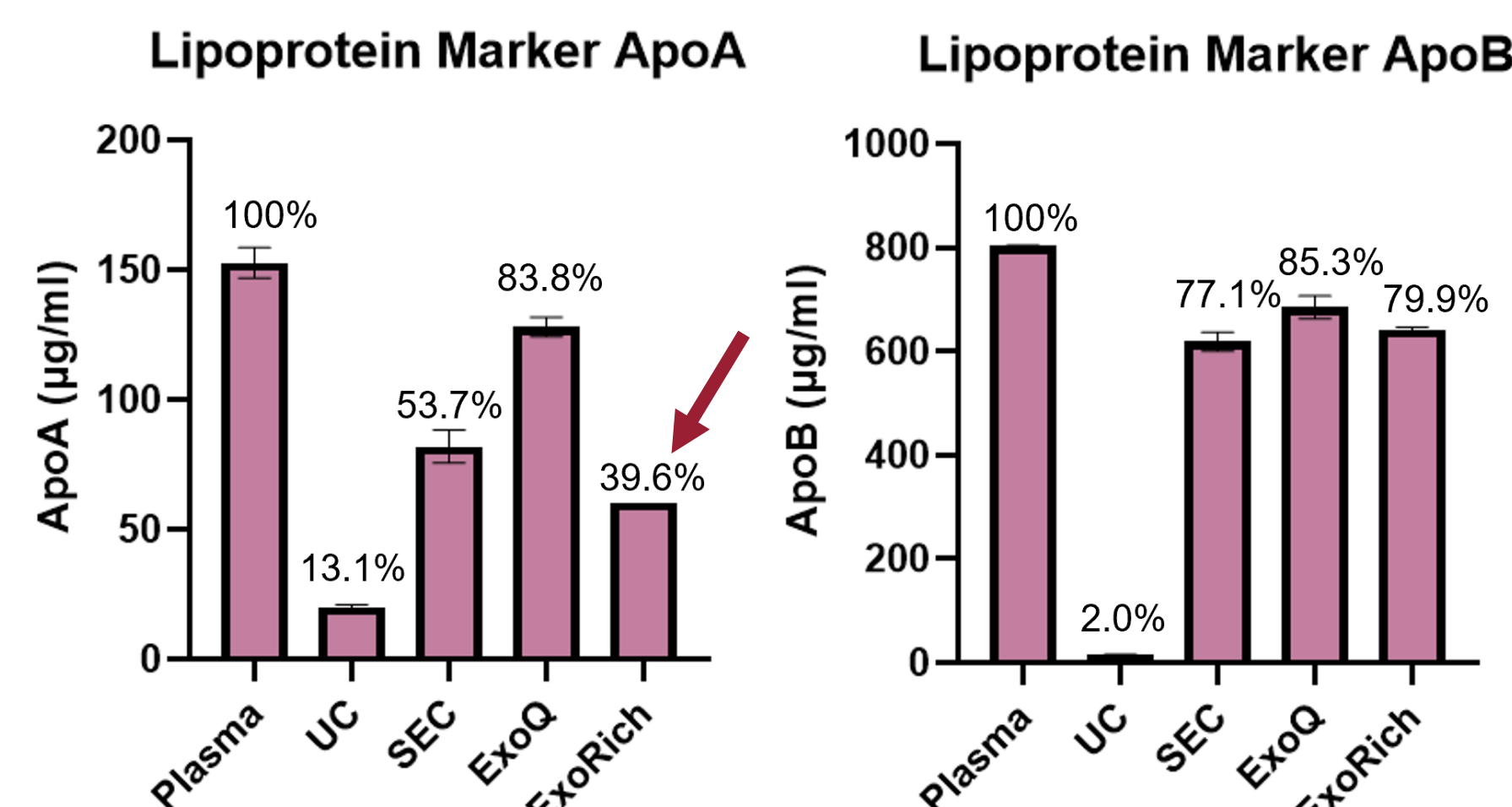
### Exosomal protein expressions

Comparison of sandwich and WB to common EVs isolation methods such as UC, SEC, and ExoQ commercial reagent, ExoRich™-treated sample show excellent agreement in exosomal protein expressions.

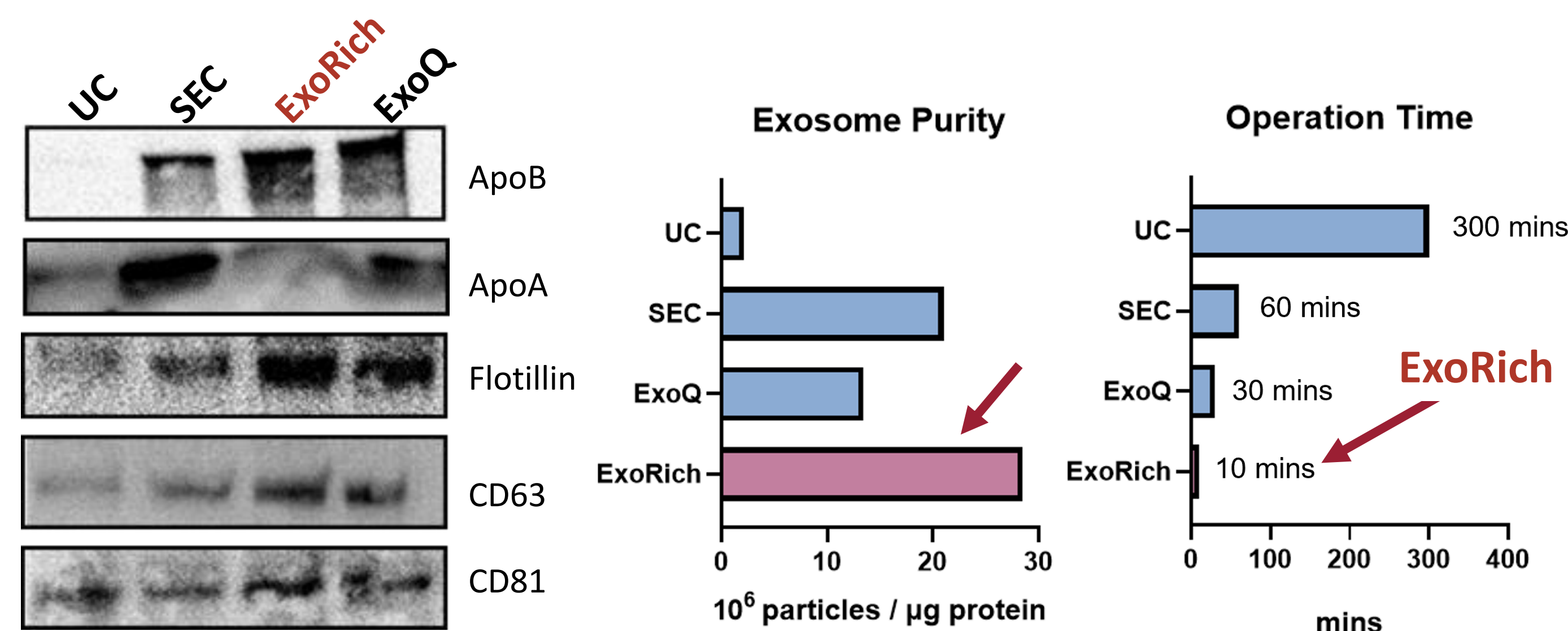
#### a) EVs sandwich ELISA expression of CD81 and CD9



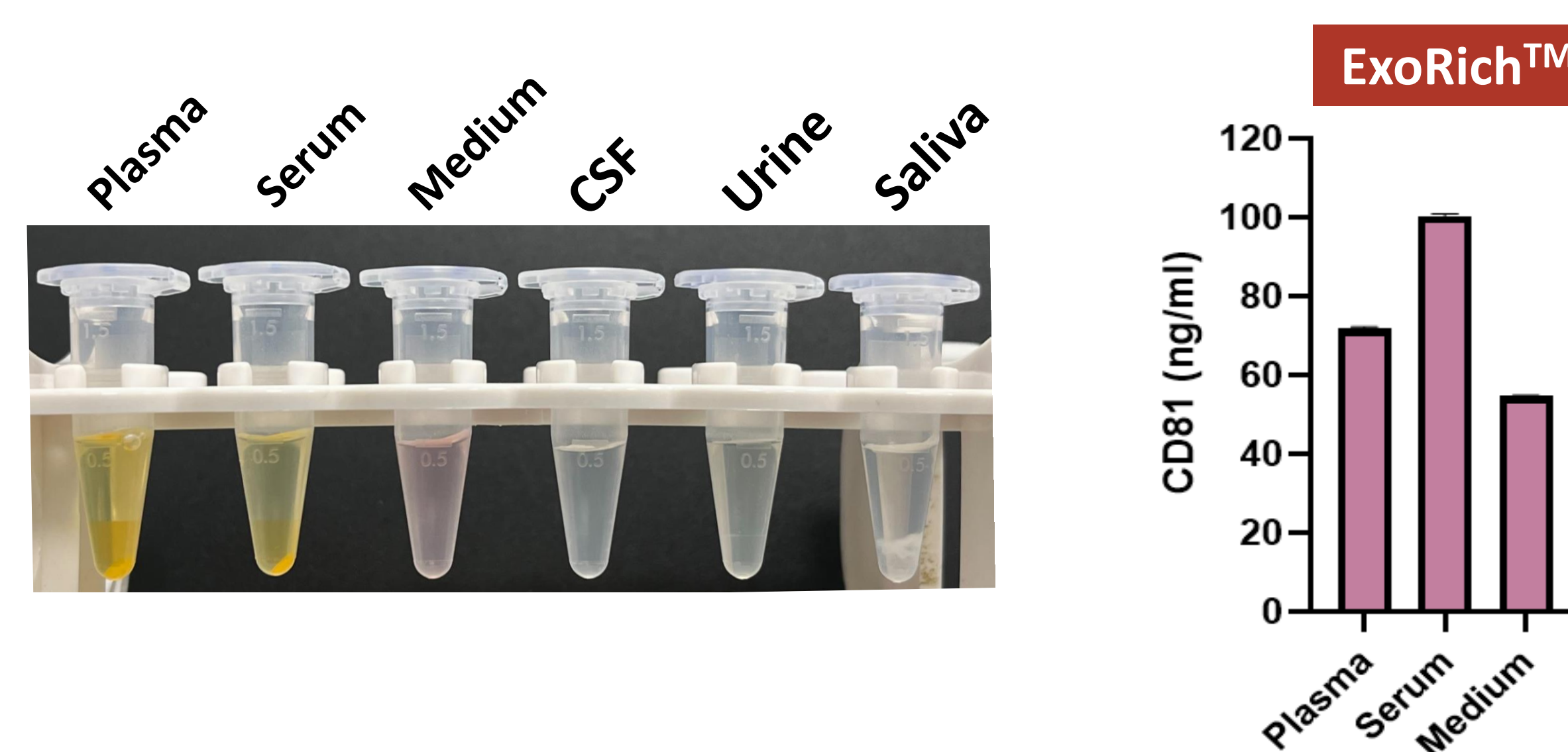
#### b) Lipoprotein sandwich ELISA expression of ApoA and ApoB



#### c) Western blot, exosomal protein purity, and operation time



### ExoRich™ isolates EVs from various biological fluids



## Conclusions

- ExoRich™ enables EV isolation from minimal amounts of plasma sample (50µL) within 15 minutes.
- ExoRich™ removes substantial ApoA (more than SEC) while retaining high CD9 & CD81 signals.

Limited Use Label License: Research Use Only (RUO) & Non-commercial  
By purchasing and/or use of this product, one acknowledges and agrees to the terms in the Manual  
©2023-2028 Reliance Biosciences.  
All Rights Reserved.