APPLICATION NOTE

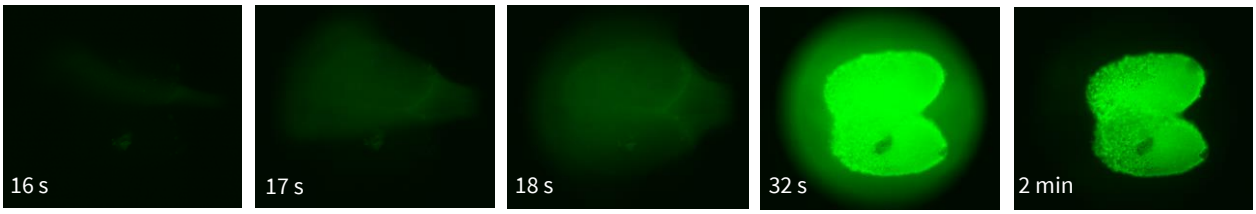
AcouTrap

Isolation of Extracellular Vesicles

AUTOMATED ENRICHMENT, STAINING AND WASHING

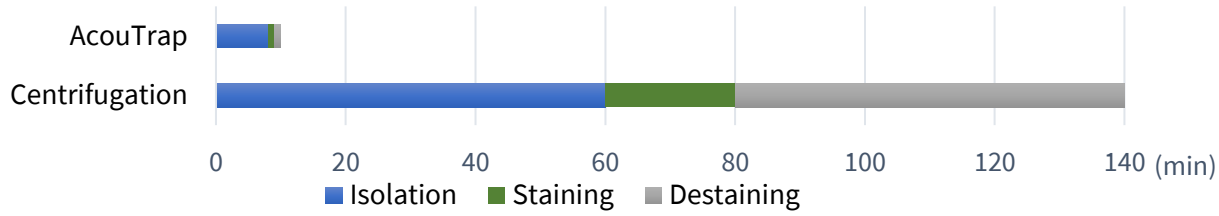
AcouTrap Enables Rapid Staining

- EVs captured and purified directly from plasma sample
- Specific staining of surface marked is achieved for levitated EVs



AcouTrap Delivers Significant Reduction in Time to Result

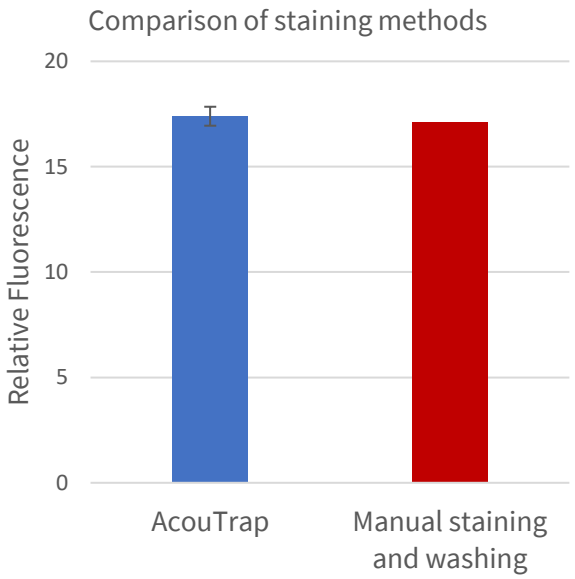
- Less than 10 minutes using AcouTrap
- 140 minutes using a centrifugation protocol

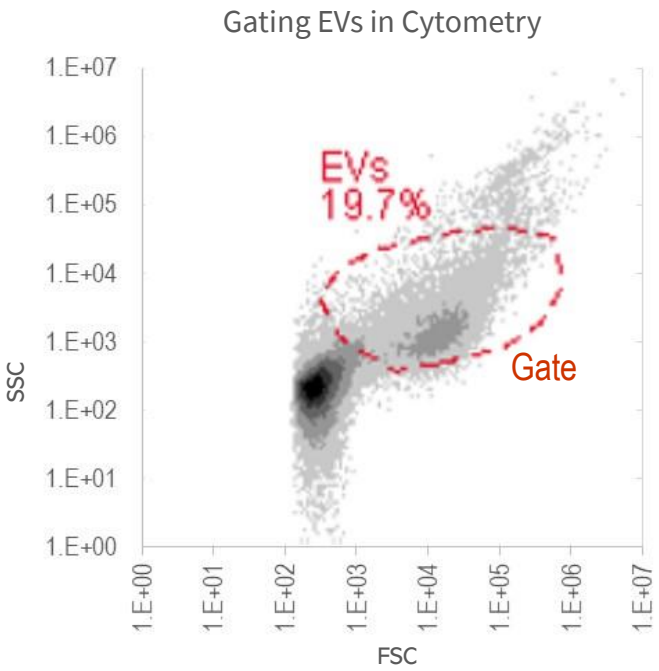


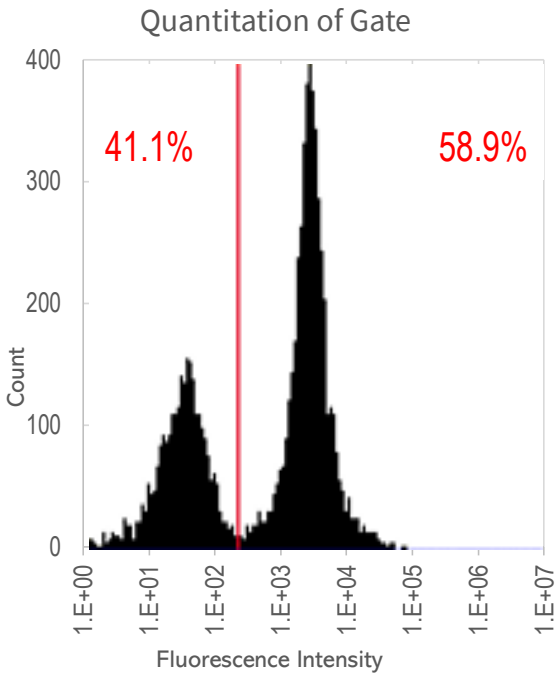
Extracellular vesicles (EVs) were enriched from human plasma using AcouTrap (6 min) or centrifugation (60 min at 20 000 g). Staining with anti-CD42a-FITC followed by washing of unbound occurred directly with AcouTrap (2 min) or separately for the centrifuged sample (20 min followed 60 min at 20 000 g). The samples were analyzed using Imagestream MKII.

Rapid Specific and Quantitative Staining of Trapped EVs

- Similar EV fluorescence achieved using AcouTrap or traditional methods
- Strong fluorescent signal apparent in imaging cytometry using AcouTrap
- Low background allows quantitative assessment of EV populations







Plasma EVs were enriched, stained with anti-CD42a FITC and washed using AcouTrap. The samples were analyzed using ImageStream MKII (top) BD Accuri C6 (bottom).