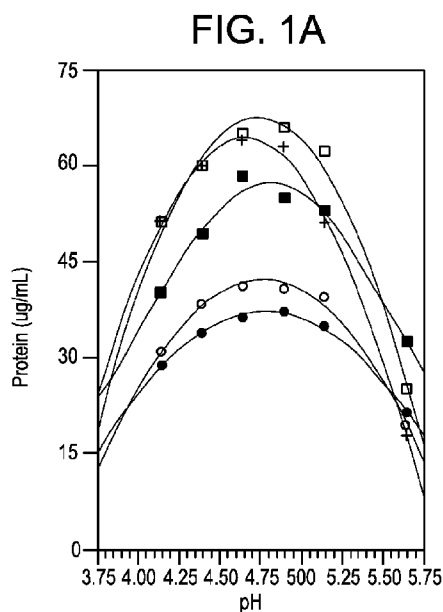




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(54) **Title:** METHODS AND COMPOSITIONS FOR ISOLATING EXOSOMES

(57) **Abstract:** Disclosed are surprising new methods and compositions for isolating extracellular microvesicles such as exosomes, particularly disease-related and phosphatidylserine (PS)-positive extracellular microvesicles as exemplified by tumor- and viral-derived exosomes. The methods of the invention are rapid, efficient, cost-effective and, importantly, are suitable for use with large volumes of biological fluids and produce antigenically intact extracellular microvesicles and exosomes. The methods and compositions are based on the surprising use of acetate buffers to isolate large quantities of extracellular microvesicles, particularly tumor-derived exosomes, from solution, without damaging their morphological or functional properties or antigenicity.