

Electronic Supplementary Information

**Combinatorial Effect of Calcium Chloride and Polyethylene Glycol
For efficient Isolation of small Extracellular Vesicles**

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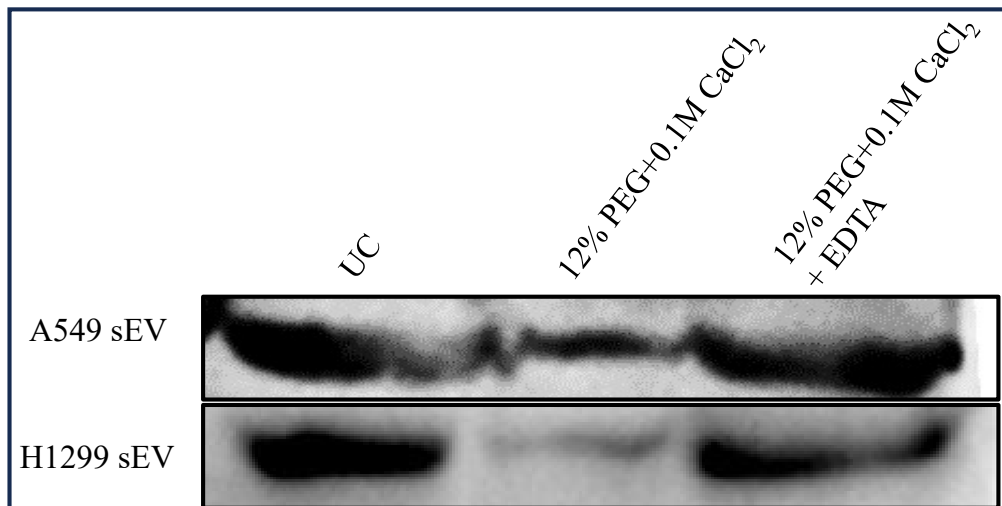


Figure S 1: Western blot of CD63 marker for H1299 and A549 sEV

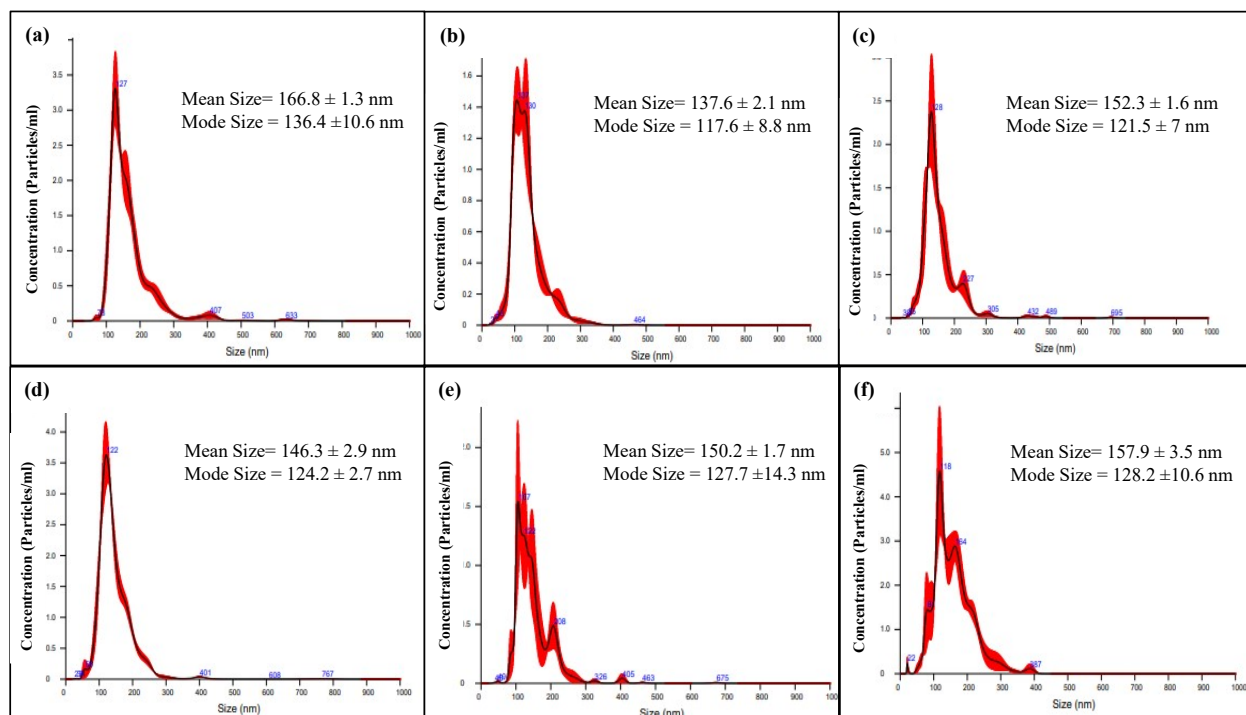


Figure S2: NTA plot of A549 EVs isolated from (a) Ultracentrifugation (b) 0.1M CaCl₂ (c) 8 % PEG + 0.1M CaCl₂ (d) 8 % PEG + 0.1M CaCl₂ (e) 8 % PEG (f) 12 % PEG.

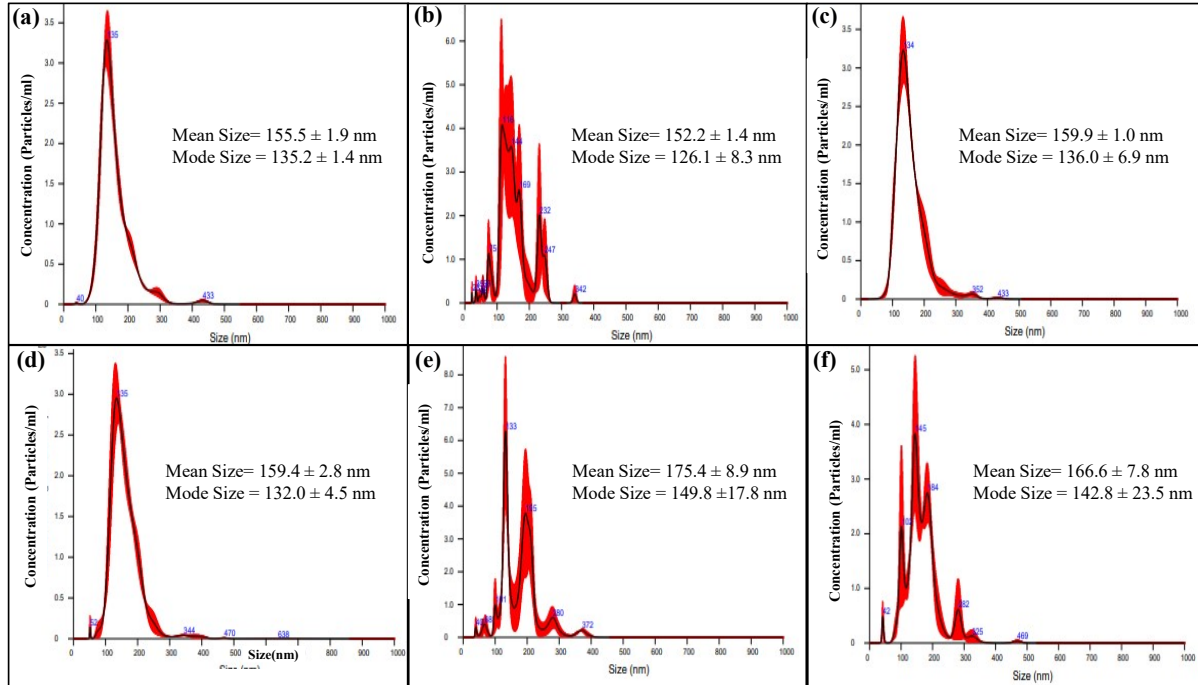


Figure S 3: NTA plot of H1299 EVs isolated from (a) Ultracentrifugation (b) 0.1M CaCl₂ (c) 8 % PEG + 0.1M CaCl₂ (d) 8 % PEG + 0.1M CaCl₂ (e) 8 % PEG (f) 12 % PEG.

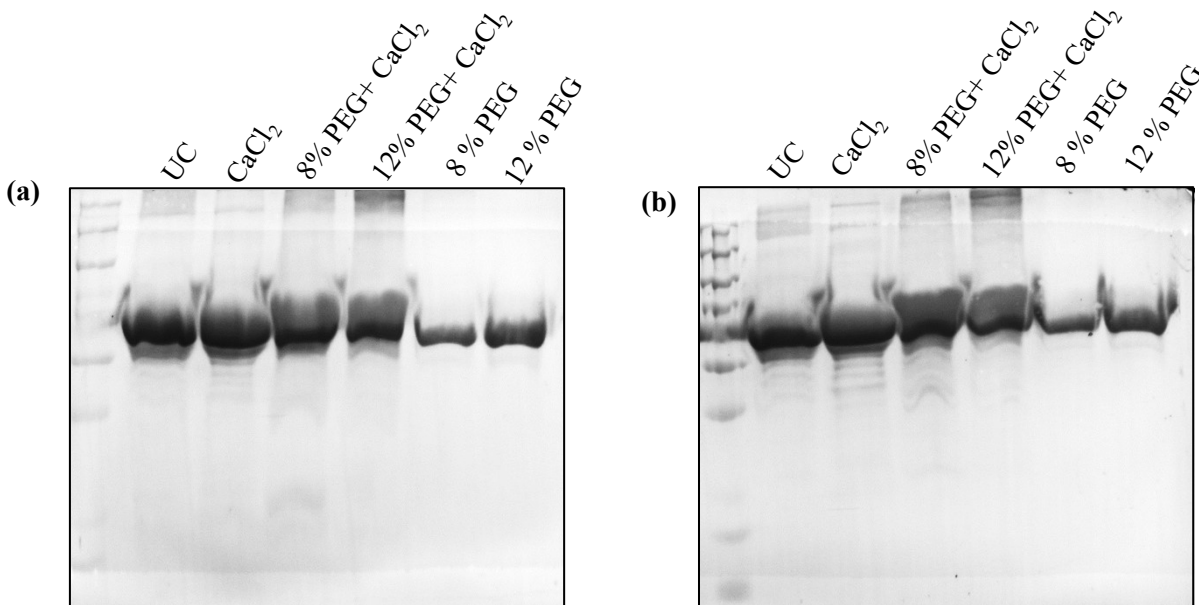


Figure S 4: Total protein staining of blot by ponceau of sEV isolated from different methods of (a) H1299 Cells and (b) A549 Cells.

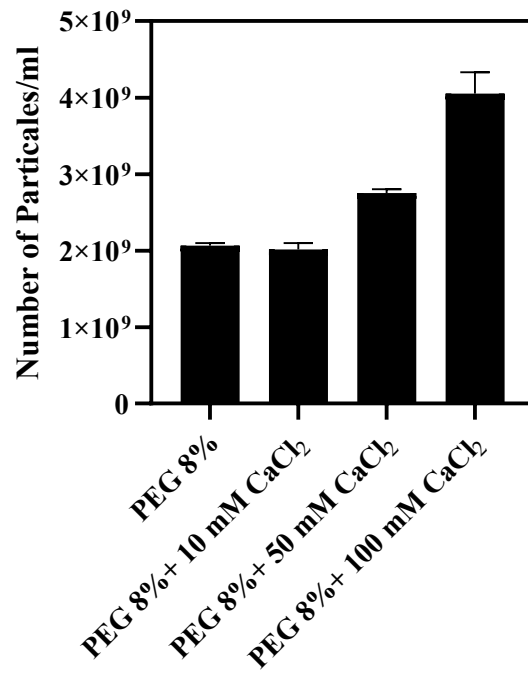


Figure S 5: NTA plot of A549 sEV isolated by different concentrations of Calcium chloride and PEG.

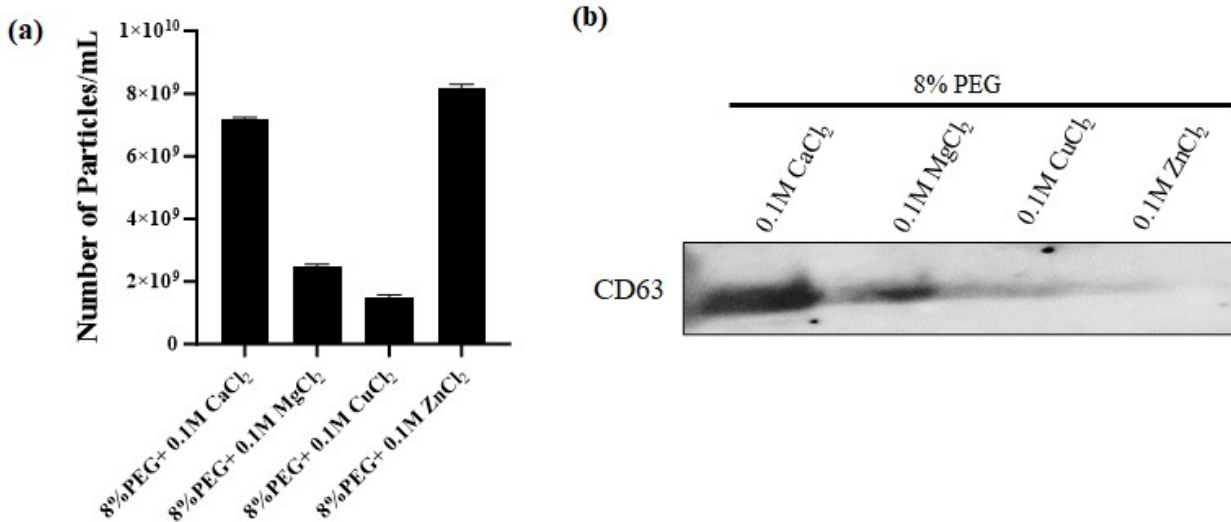
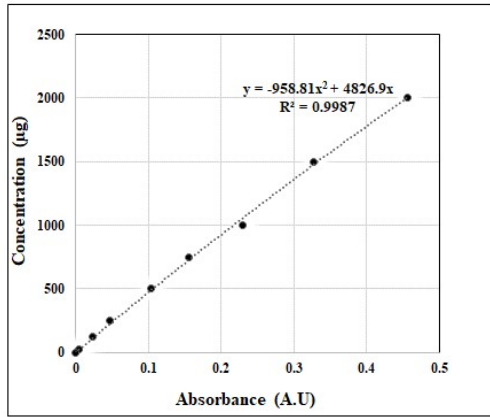


Figure S 6: (a) NTA plot (b) Western blot for EVs marker CD63 of A549 EVs with 0.1M of metal ions + 8% PEG.

(a)

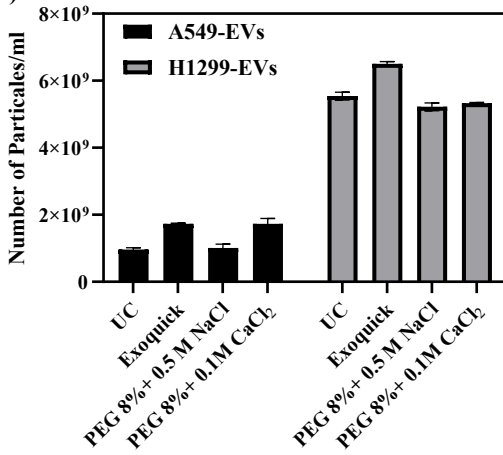


(b)

Serial No.	Formulations	A549 sEV	H1299 sEV
		Concentration (µg/ml)	Concentration (µg/ml)
1	UC	1.819879	1.645453
2	Exoquick	0.779256153	0.815311894
3	PEG/NaCl	0.364149163	0.702366445
4	PEG/CaCl ₂	1.483822	1.268256

Figure S 7 (a) BCA Calibration curve of protein and (b) Protein value calculated from curve for A549 sEV and H1299 sEV.

(a)



(b)

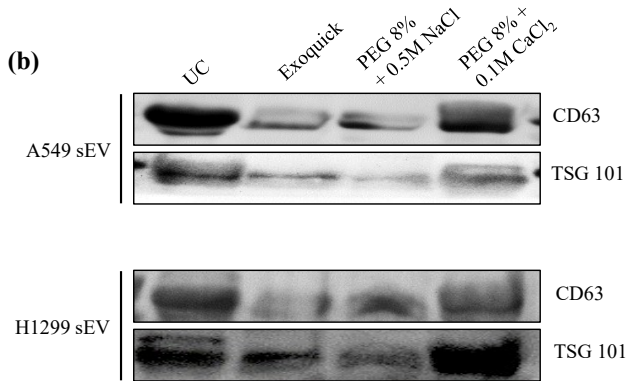


Figure S 7: (a) NTA plot (b) Western blot for sEV marker CD63 and TSG101 of A549 EVs and H1299 sEV isolated from different method.

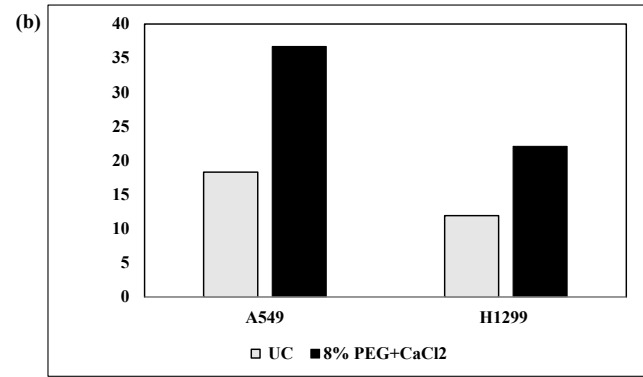
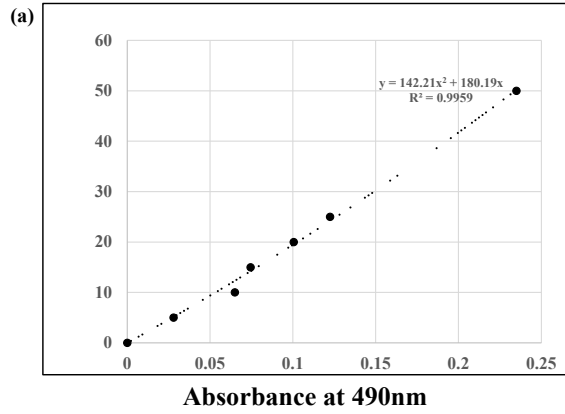


Figure S 8: (a) Calibration curve of known concentration of doxorubicin (b) Amount of doxorubicin present inside the sEV after purification.