

Liquid Crystal Droplet-Based Amplification of Microvesicles that are Shed by Mammalian Cells

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Electronic Supplementary Materials (ESI)

lipid tails	mol %
C14:0	2.2
C16:1	4.7
C16:0	23.2
C18:2	20.6
C18:1	32.5
C18:0	16.7

Figure S1: GC-MS analysis of the lipids tails of A431 cells-derived MVs.

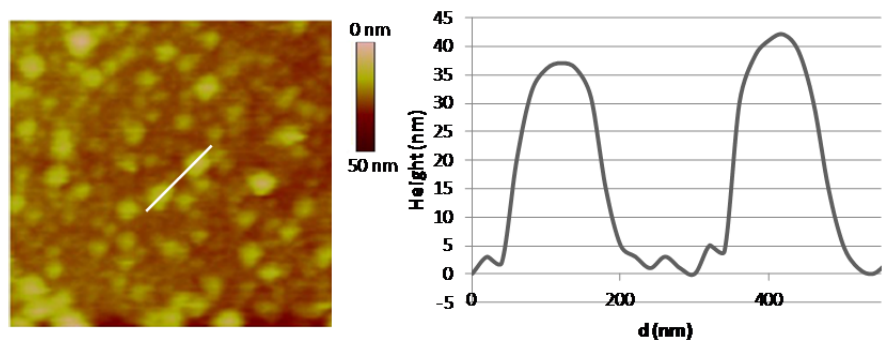


Figure S2: AFM image of a surface decorated with anti-EGFR 111.6 and subsequently incubated with MVs derived from A431 cells. The line corresponds to the location of the measurement of the cross sectional height (right plot).

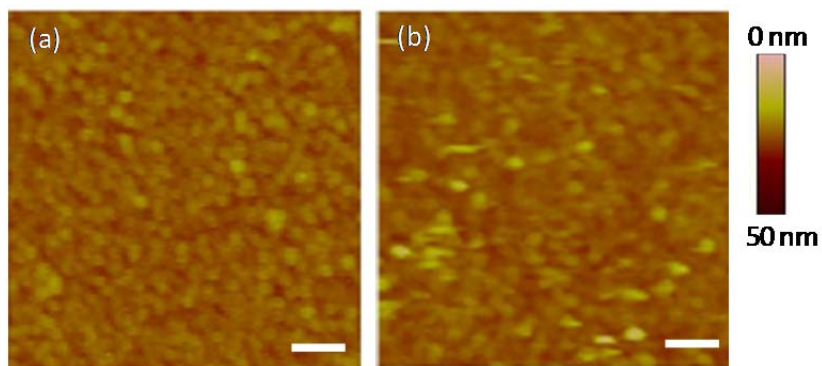


Figure S3: AFM images of (a) a surface decorated with an isotype control IgG and (b) a surface decorated with isotype control IgG and subsequently incubated with MVs derived from A431 cells (scale bar: 500 nm).

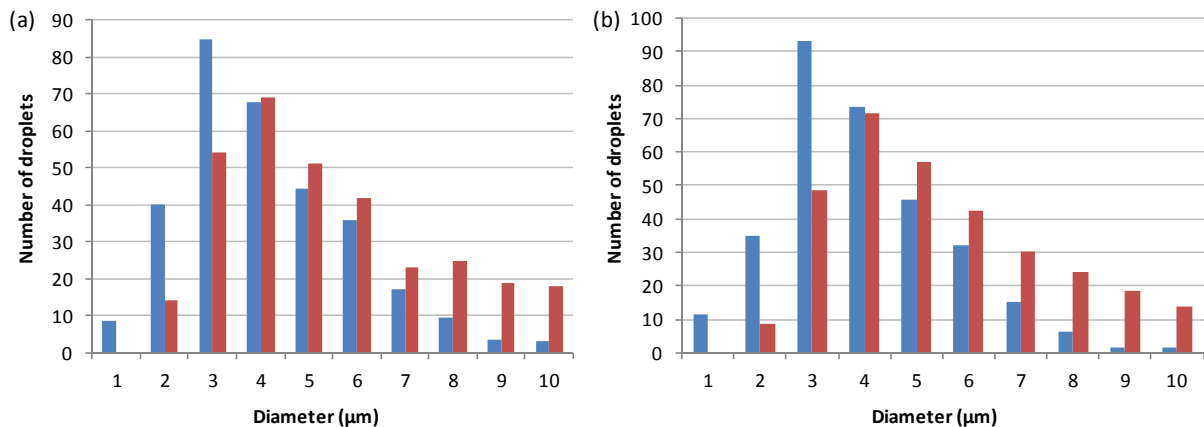


Figure S4: Time-dependent size distributions of LC droplets in the (a) absence and (b) presence of lipids extracted from MVs (blue bars – 0 h and red bars – 6 h).

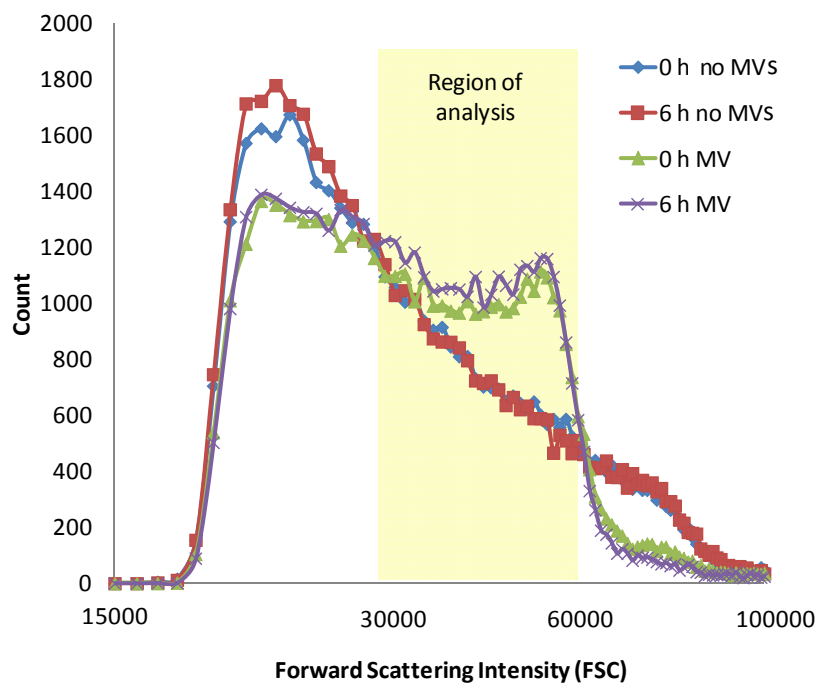


Figure S5. Frequency histogram for FSC obtained for radial (with MVs) and bipolar (no MVs) LC droplets at $t = 0$ h and $t = 6$ h.

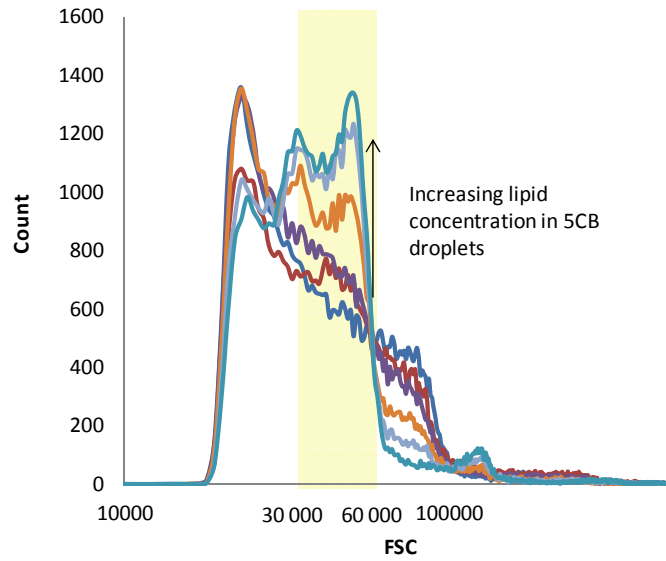


Figure S6: Frequency histogram for FSC obtained with increasing concentration of lipids in 5CB droplets.

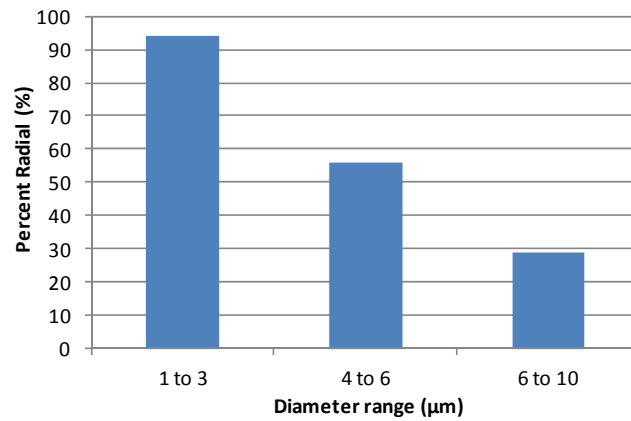


Figure S7. Percentage of radial LC droplets as a function of diameter of LC droplets in the presence of lipids extracted from $5 \cdot 10^7$ MVs.

$\mu\text{L of 5CB}$	# of lipids per droplet	
	10^7 MVs	10^6 MVs
1	10^6	10^5
0.3	$3 \cdot 10^6$	$3 \cdot 10^5$
0.1	10^7	10^6
0.03	$3 \cdot 10^7$	$3 \cdot 10^6$

Table S1: Theoretical amount of lipids in each droplet with a given amount of MVs and volume of 5CB used.