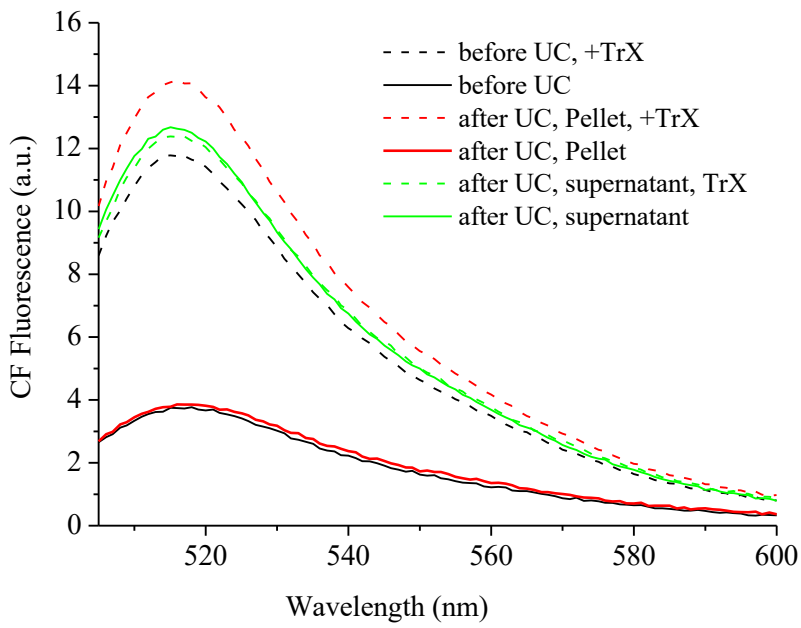
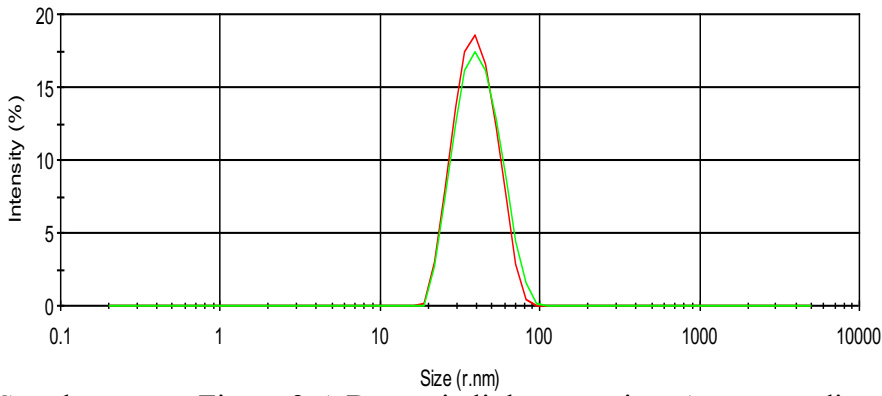


Supplementary Figure 1-A. Thermal stability of liposomes with encapsulated carboxyfluorescein (CF) measured based on self-quenching of CF and its release upon heating



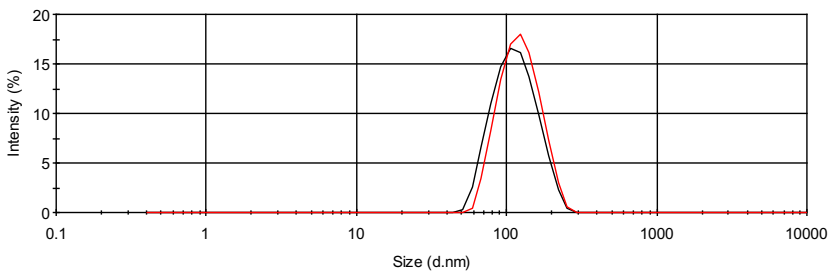
Supplementary Figure 1-B. Integrity of liposomes before and after ultracentrifugation with encapsulated carboxyfluorescein (CF) measured based on self-quenching of CF and its release after addition detergent Triton-X

Size Distribution by Intensity



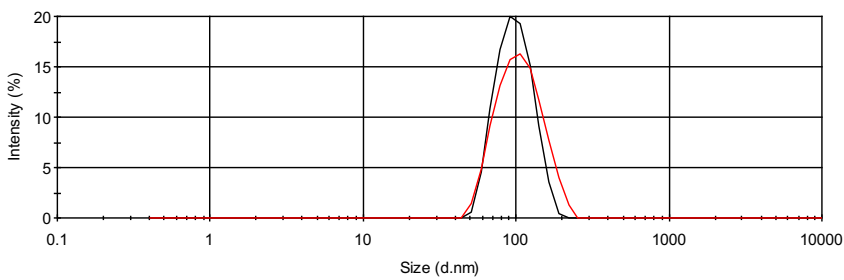
Supplementary Figure 2-A Dynamic light scattering. Average radius of immunoliposome and control liposome formulations after extrusion

Size Distribution by Intensity



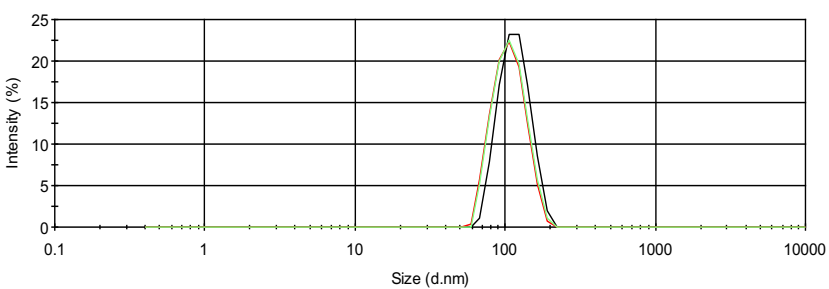
Supplementary Figure 2-B Dynamic light scattering. Average diameter of aSMA-immunoliposomes (black line) and control liposome with aSMA (red line) after ultracentrifugation (pellet fraction)

Size Distribution by Intensity

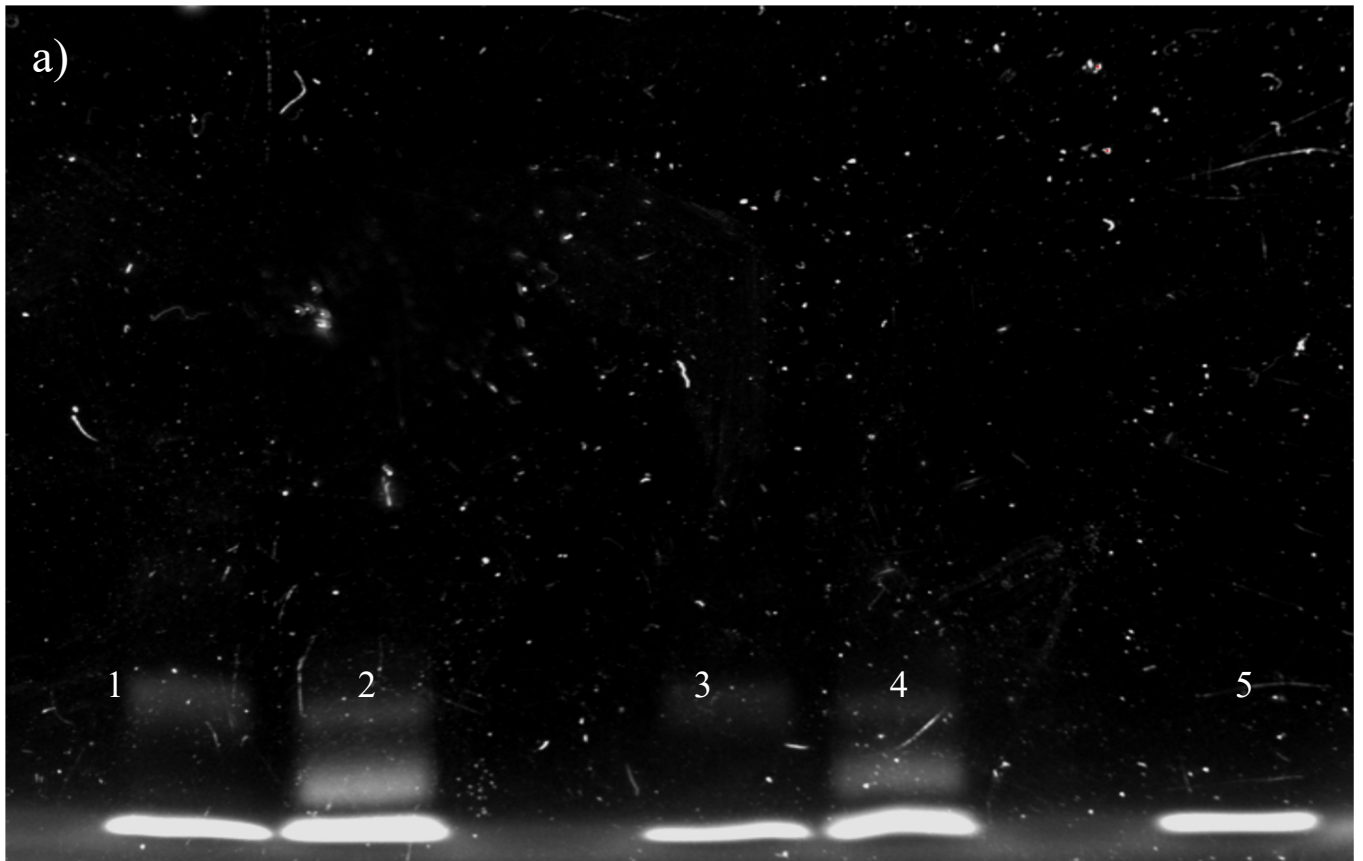


Supplementary Figure 2-C Dynamic light scattering. Average diameter of aCD31-immunoliposomes (black line) and control liposome with aCD31 (red line) after ultracentrifugation (pellet fraction)

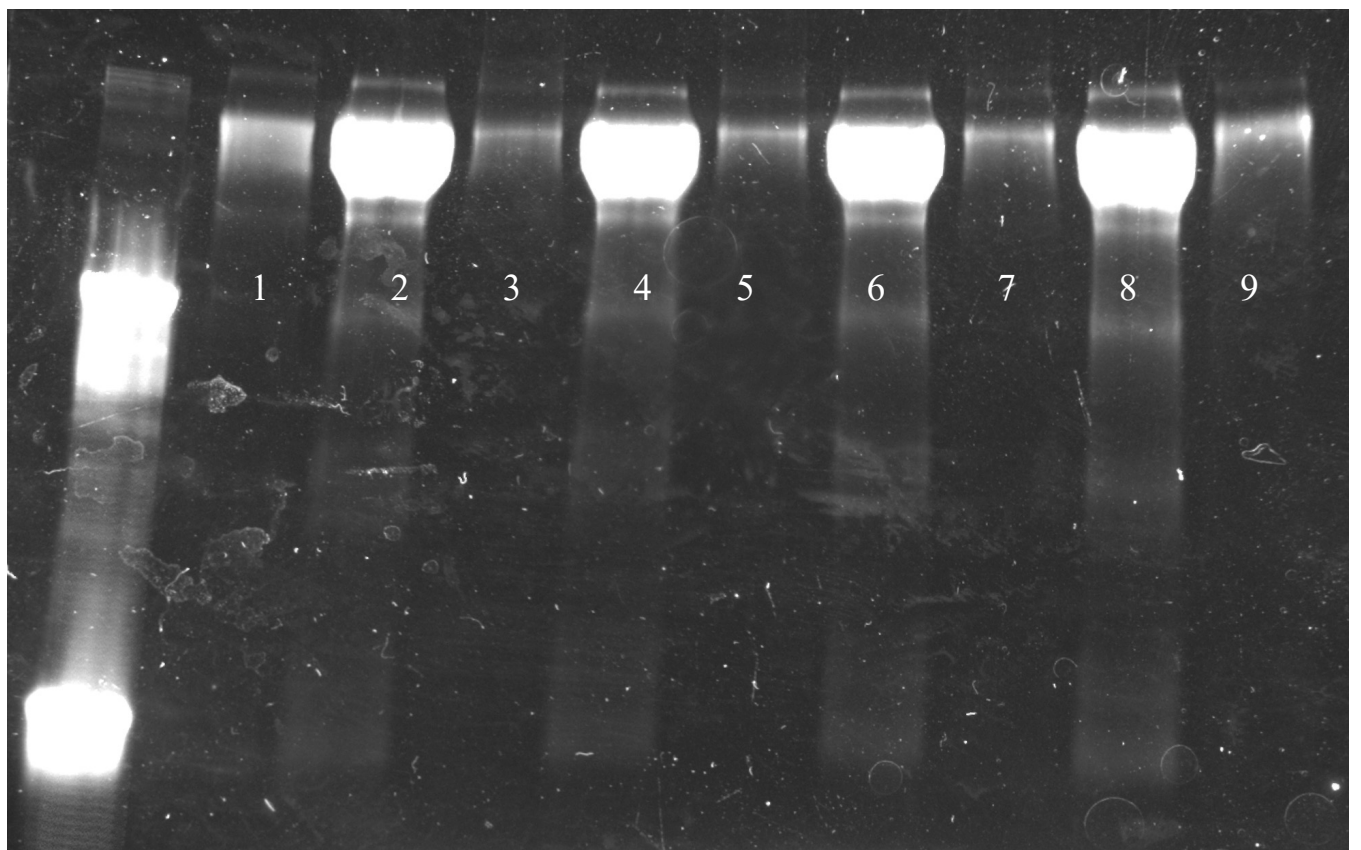
Size Distribution by Intensity



Supplementary Figure 2-D Dynamic light scattering. Average diameter of Gd-immunoliposome formulations: black line, DOTAREM liposome; green line, GD-DTPA is 5mol%; red line, Gd-DTPA is 10mol%



Supplementary Figure 3. A) SDS_PAGE of Lysozyme conjugation to LUVs. 1,3 – LUVs without maleimide group (control liposomes) 2,4 – LUVs with maleimide group (immunoliposomes formulation), (2) lysozyme treated by TR at ratio 1:50 (4) TR ratio 1:20 (4) 5 – monomeric lysozyme



Supplementary Figure 3. B) SDS_PAGE of IgG conjugation to immunoliposome formulation after ultracentrifugation
 1 – is monomeric IgG; and 2-9 are supernatant and pellet fractions alternates correspondingly.
 2,3 - IgG treated by TR at ratio 1:5; 4,5 – TR ratio 1:10; 6,7 – TR ratio 1:20 and 8,9 – TR ratio 1:50