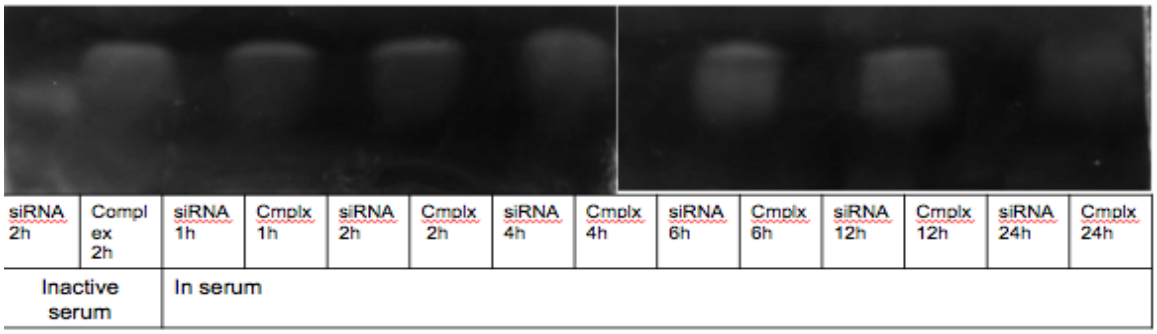
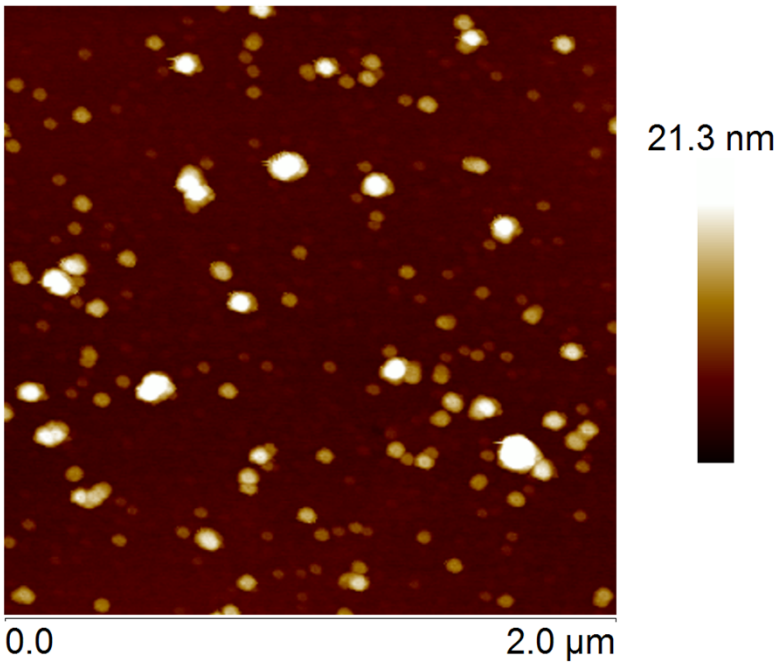
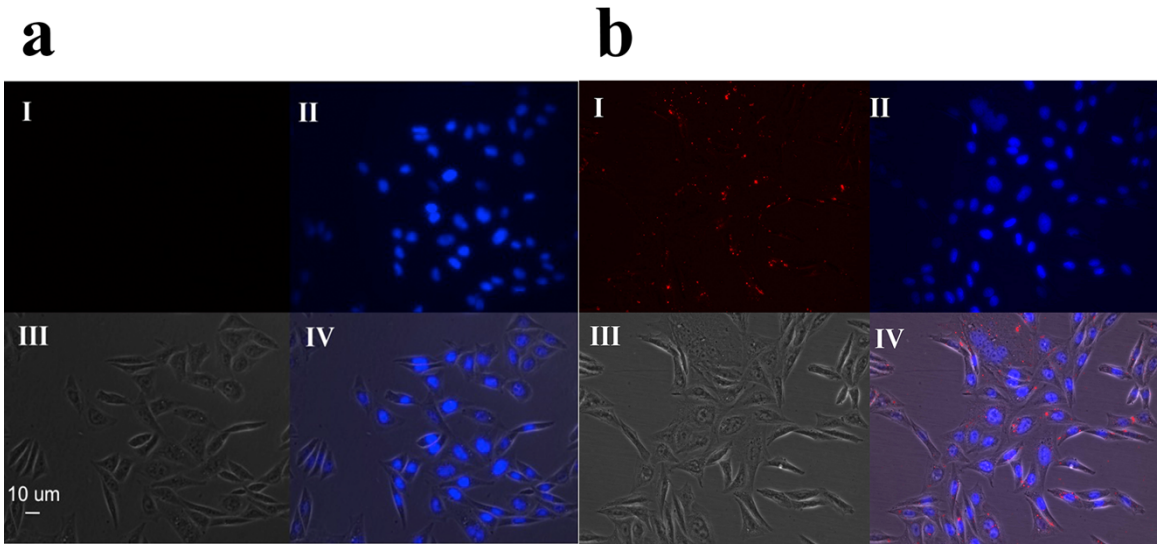


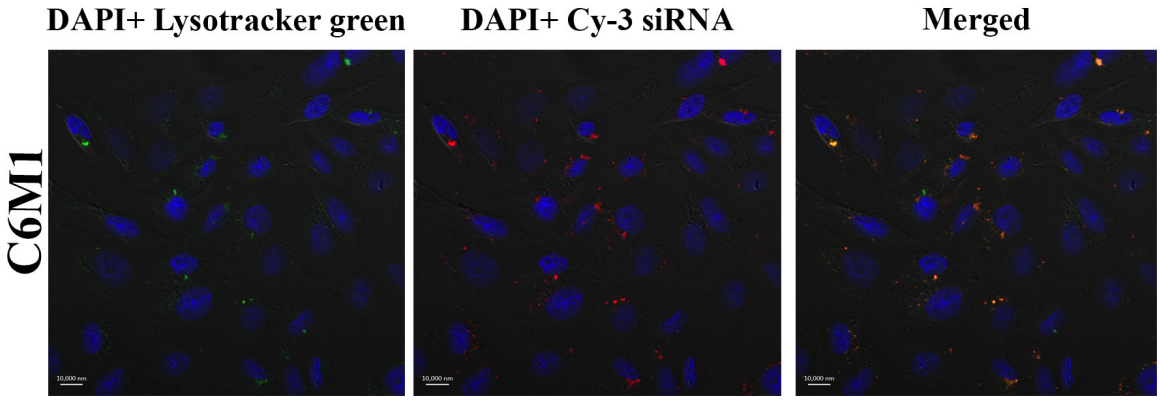
Supplementary Figure 1. C6M1 could protect siRNA from serum degradation. The siRNA only and siRNA complexed with the peptide were incubated with serum. C6M1 could protect siRNA molecules in serum for up to 24 h, note the band for the peptide-siRNA complex.

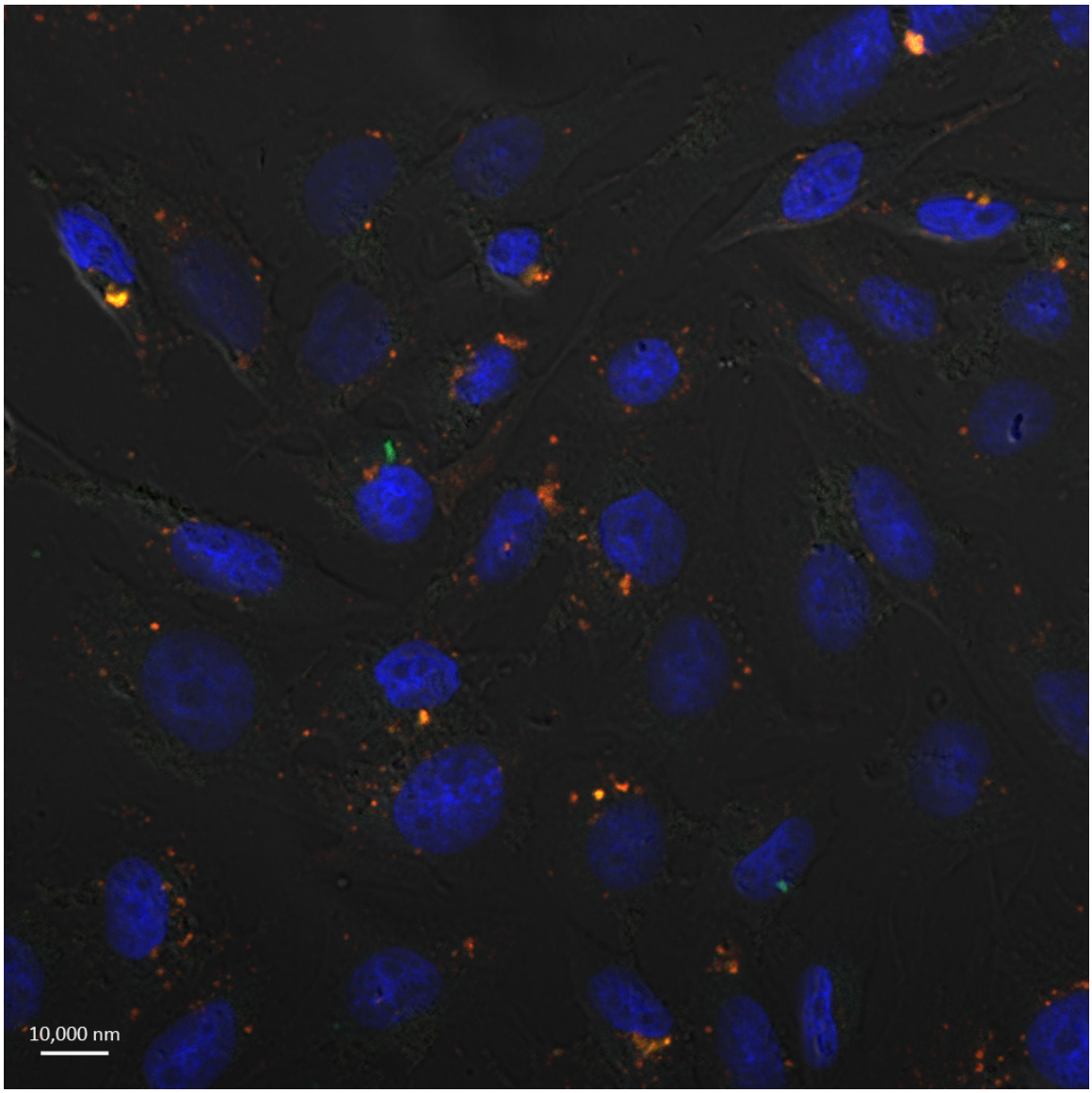


Supplementary Figure 2. AFM image of C6M1/siRNA complexes. The sample solution (10 µL) was placed on the mica surface and incubated for 30 min at room temperature. The mica was then rinsed five times with Milli-Q water, followed by air-drying overnight. The scan size of the images is 2 × 2 μm^2.

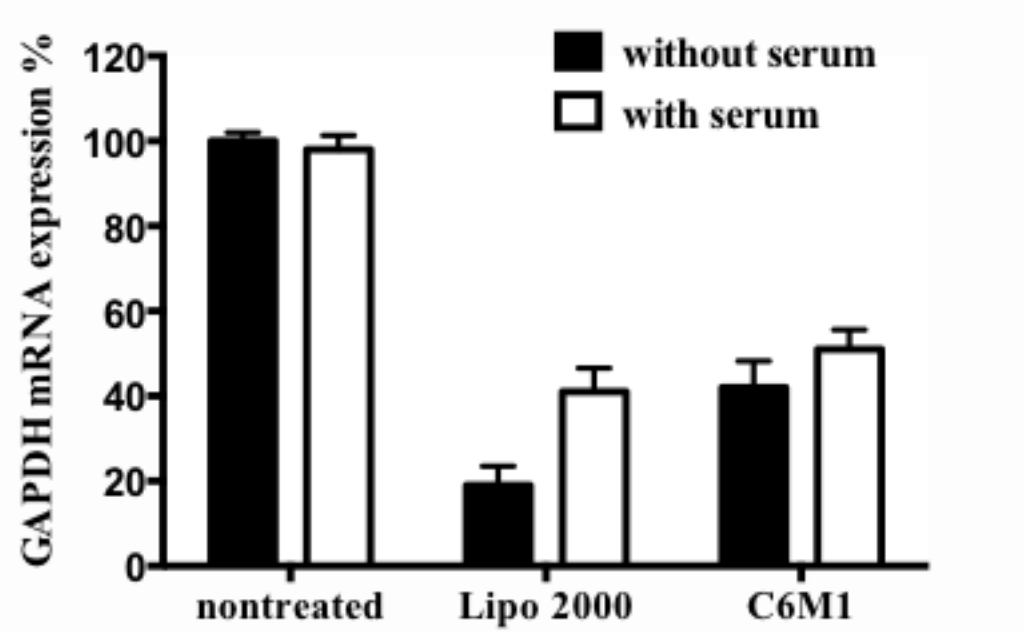


Supplementary Figure 3. Uptake of C6M1/siRNA complexes in CHO cells. Fluorescent microscopy analysis of CHO cells 3 h after transfection with Cy-3 labeled GAPDH siRNA alone (a) or Cy-3 siRNA/C6M1 complexes (b), respectively. Panel i. Cy3-labeled siRNA (red); Panel ii. Nuclei were stained with DAPI (blue); Panel iii. differential interference contrast (DIC); Panel iiii. merged image. Scale bar stands for 10 um.

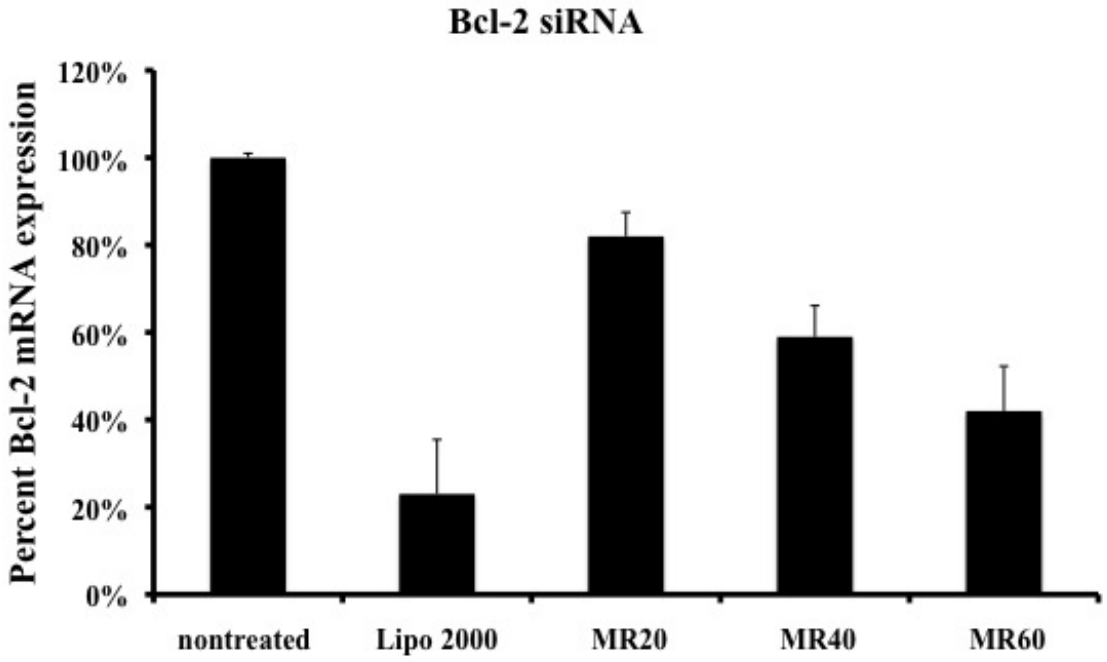




Supplementary Figure 4. Confocal microscopy images of CHO-K1 cells treated with C6M1 peptide carrying 50 nM Cy-3 labeled siRNA. Images were taken 9 h after treatment. Images were pseudocolored for visualization: blue = DAPI; red = Cy-3 siRNA; green = LysoTracker Green. Co-localization of siRNA with the endosomal/lysosomal marker is in yellow. To clearly see the intracellular location of the complexes, the merged image was enlarged.



Supplementary Figure 5. Silencing effect of C6M1/siRNA complexes targeting GAPDH gene in CHO-K1 cells in the presence of serum. All the data were normalized to a house keeping gene cyclophilin and compared to scrambled siRNA control.



Supplementary Figure 6. Silencing effect of C6M1/siRNA targeting Bcl-2 gene in A549 cells. At siRNA concentration 50nM, C6M1 provides effective knockdown relative to nontreated cells.