

Supplementary Materials: siRNA Targeting Mcl-1 Potentiates the Anticancer Activity of Andrographolide Nanosuspensions via Apoptosis in Breast Cancer cells

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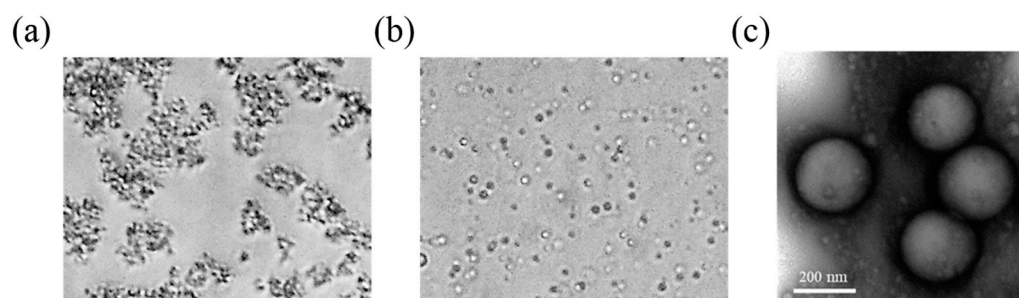


Figure S1. Morphology of (a) 3nAG suspension and (b) 3nAGN-NSC under 100X inverted microscope and (c) TEM image of 3nAGN-NSC.

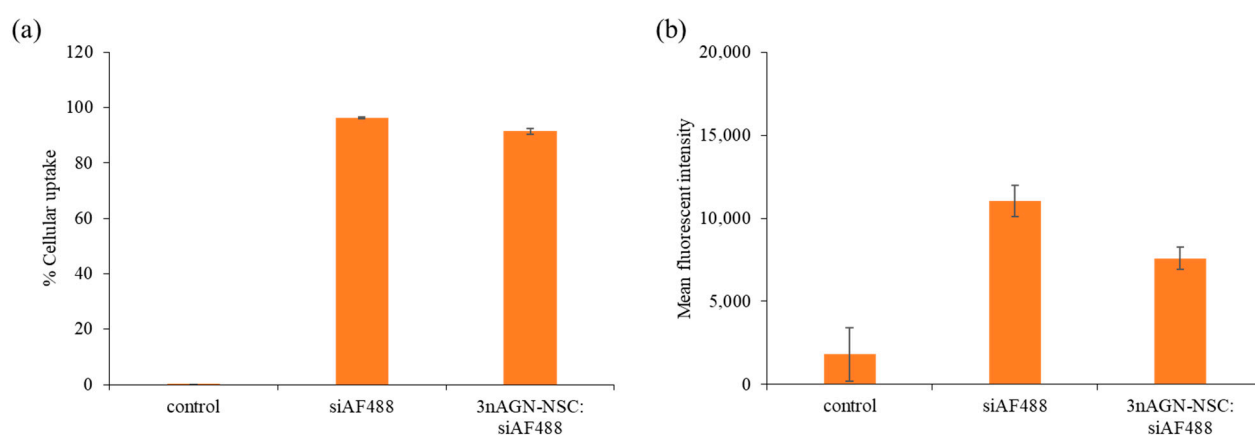


Figure S2. (a) Cellular uptake and (b) mean fluorescent intensity of siAF488 transfected with cationic niosomes and siAF488 in the combination with 3nAGN-NSC in MCF-7 cells.

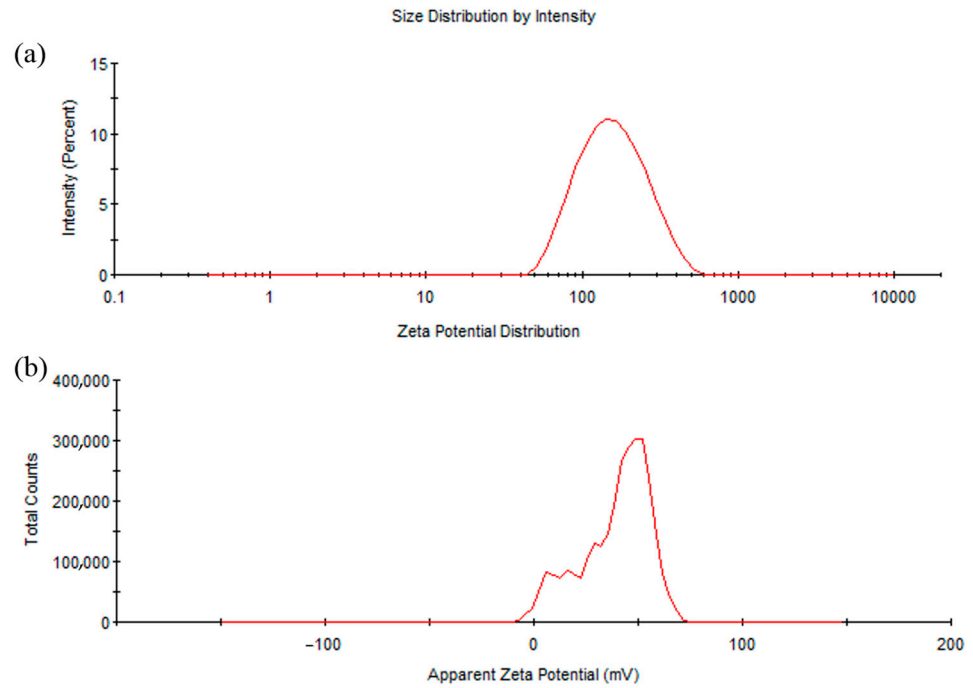


Figure S3. Characterization of cationic niosomes: (a) size distribution (mean particle size of 150.50 ± 5.52 nm) and (b) zeta potential distribution (mean zeta potential of $+39.10 \pm 1.89$ mV) obtained from the Zetasizer Nano ZS.

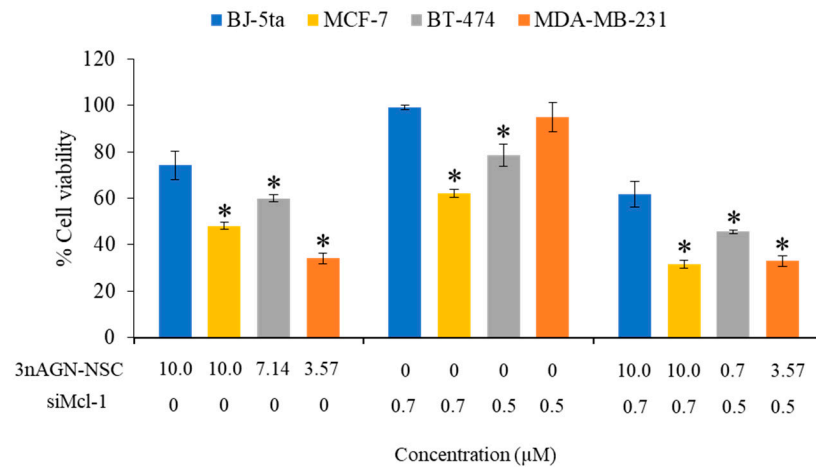


Figure S4. The cell viability of a single treatment with 3nAGN-NSC or siMcl-1 and the combination of 3nAGN-NSC: siMcl-1 (The tested concentration was nearly the IC₅₀ of 3nAGN-NSC in each breast cancer cell) in normal human fibroblast cells (BJ-5ta cells), and breast cancer cells (MCF-7, BT-474 and MDA-MB-231 cells), which was examined by MTT assay. The cell was tested in the same condition with the method section 4.5. The BJ-5ta cells were maintained in DMEM containing 10% FBS, 1% L-glutamine, 1% non-essential amino acids solution, 100 U/ml penicillin, and 100 mg/ml streptomycin at 80% confluency before seeding. *The data is significantly different from BJ-5ta ($p < 0.05$).

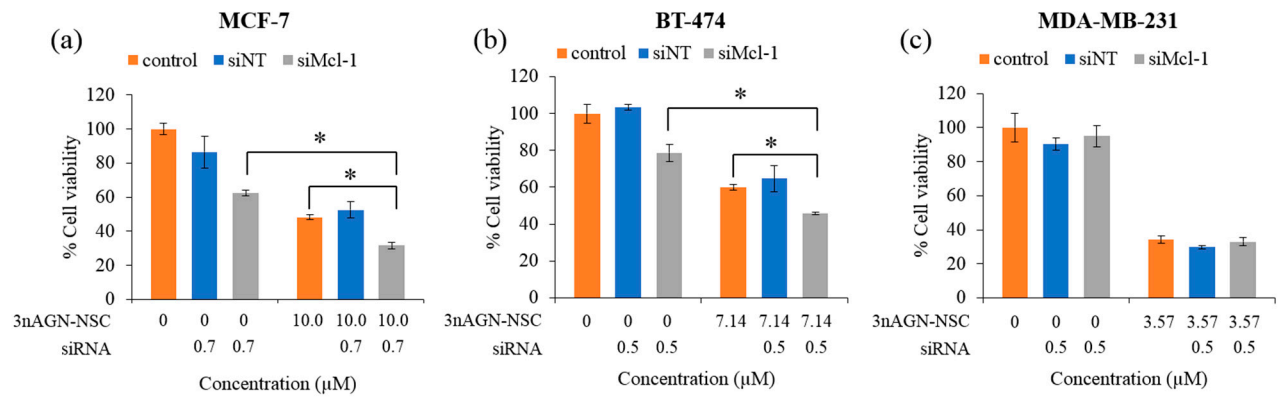


Figure S5. The cell viability of (a) MCF-7 with the combination 3nAGN-NSC: siMcl-1 (100: 0.07, 10 and 0.07 μM, respectively), (b) BT-474 after treatment with the combination 3nAGN-NSC: siMcl-1 (100: 0.07, 7.14 and 0.05 μM, respectively) and (c) MDA-MB-231 after treatment with the combination 3nAGN-NSC: siMcl-1 (50: 0.07, 3.57 and 0.05 μM, respectively). *The data is significantly different ($p < 0.05$).