

Figure S1. Particle Size Distribution Intensity Diagram of SLN_{HM}.

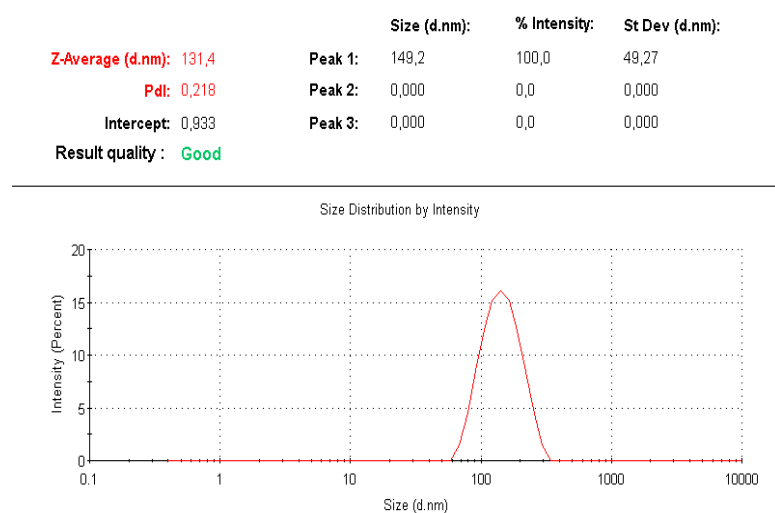


Figure S2. Particle Size Distribution Intensity Diagram of mRNA-HA-SLN_{HM} bearing CleanCap[™] EGFP mRNA (5moU).

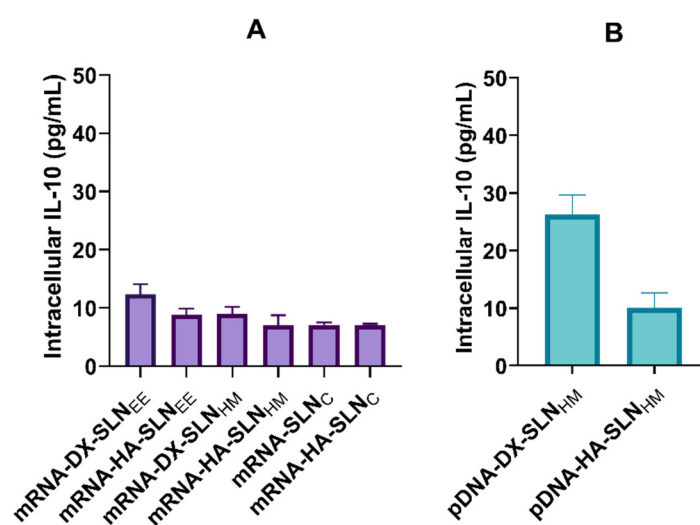


Figure S3. Intracellular levels of IL-10 in HCE-2 cells after the administration of SLN-based vectors bearing IL-10 mRNA and pUNO1-hIL10 plasmid. (A) Concentration of intracellular IL-10 48 h after the administration of mRNA-based vectors. (B) Concentration of intracellular IL-10 72 h after the administration of pDNA-based vectors. DX: dextran; HA: hyaluronic acid; SLN_{EE}: solid lipid nanoparticle prepared by emulsification-evaporation method; SLN_{HM}: solid lipid nanoparticle prepared by hot-melt emulsification method; SLN_C: solid lipid nanoparticle prepared by coacervation method.

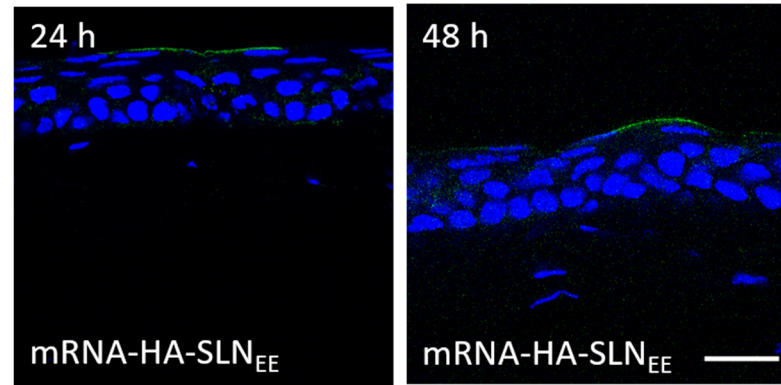


Figure S4. In vivo corneal transfection in wild type mice 24 h and 48 h after the administration of mRNA-HA-SLN_{EE} with PVA (63×). Blue: nuclei stained with DAPI. Green: green fluorescent protein. Scale bar: 20 μ m. HA: hyaluronic acid; SLN_{EE}: solid lipid nanoparticle prepared by emulsification-evaporation method.