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Supplementary Information

A Cell Membrane Repair-Based Nanoformulation with Multiple Actuators for Scarless Wound Healing

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Table S1. Characterization and properties of the obtained nanoformulations.

Samples	D_H (nm)	PDI	Zeta potential (mV)	EE (%)	LC (%)
rhMG53@TSCL1	219.5 ± 4.7	0.15 ± 0.03	1.90 ± 0.56	61.1± 2.1	17.3± 0.6
rhMG53@TSCL2	224.9 ± 2.9	0.13 ± 0.01	2.86 ± 0.65	62.5 ± 5.1	16.9 ± 1.4
rhMG53@TSCL3	241.9 ± 3.4	0.21 ± 0.02	3.12 ± 0.25	61.6 ± 2.3	15.3 ± 0.6

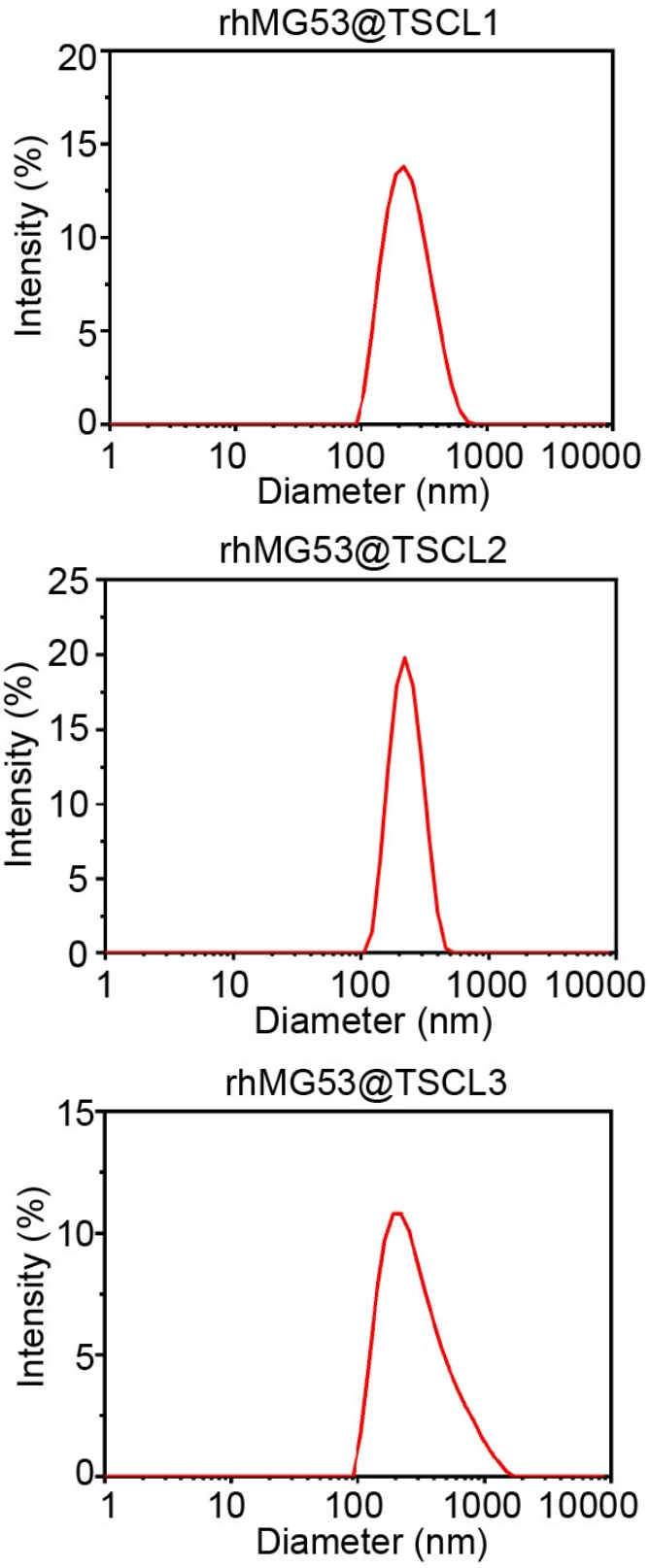

Figure S1. The size distribution of rhMG53@TSCL1, rhMG53@TSCL2 and rhMG53@TSCL3 measured by DLS.

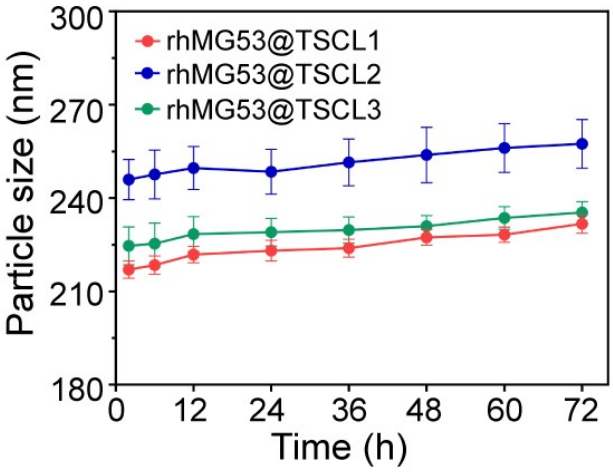

Fig. S2. Physical stability of rhMG53@TSCL1, rhMG53@TSCL2 and rhMG53@TSCL3 at room temperature within 72 h measured by DLS. Each value represents mean ± SD (n = 3).

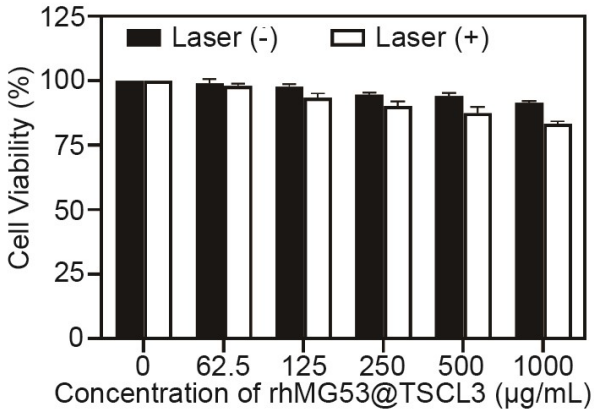

Figure S3. Cell viability determined by a CCK-8 assay after NIH/3T3 cells were cocultured with various concentrations of rhMG53@TSCL3 without/with laser irradiation. Each value represents mean ± SD (n = 3).