Supplementary Materials

Injectable Hydrogel with Dual-Sensitive Behavior for Targeted Delivery of Oncostatin M to Improve Cardiac Restoration after Myocardial Infarction

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1. Materials and Methods

1.1. Western blotting

After treatment, the cells were lysed with 1:100 (v/v) PMSF-modified RIPA buffer. After total protein content was determined, the samples were subjected to 10% sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE). The isolated protein bands were transferred to polyvinylidene fluoride (PVDF) membranes and incubated at 4 ℃ overnight with GAPDH (1: 4000) and p-gp130 (1:500) primary antibodies. The cultured PVDF membranes were incubated with suitable horseradish peroxidase (HRP)-conjugated secondary antibody (1:2 000) at 37 ℃ for 2 h. Finally, the antigen-antibody complex was observed using an ECL kit. Relative expression was quantified using ImageJ with GAPDH as an internal parameter.

1.2.Table S1 Primers of RT-qPCR

Gene name	Forward （5′-3′）	Reverse （5′-3′）
β-actin (Rat)	*GCTGTGCTATGTTGCCCTAGAC*	*CCGCTCATTGCCGATAGTGATG*
mTOR	*GCAATGGGCACGAGTTTGTT*	*AGTGTGTTCACCAGGCCAAA*
PI3K	*ACACGGGGGCATTCAAAGAT*	*GTCGTTGTGCCTGTCACCTA*
AKT	*AAGGACCCTACACAGAGGCT*	*AAGGTGGGCTCAGCTTCTTC*
ERK	*CTTTGGCCTCTCTCGCTACC*	*CAGGTATCTTCCCTCCCAAGG*

2. Figures and schemes Legends

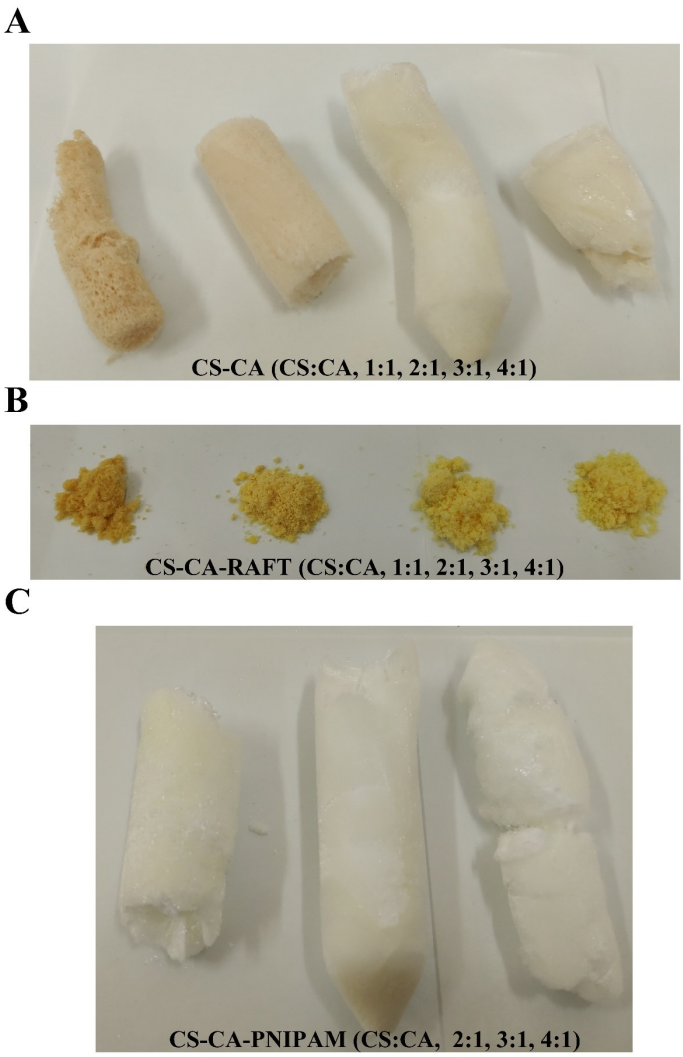

Fig. S1 Digital photo of important intermediates.

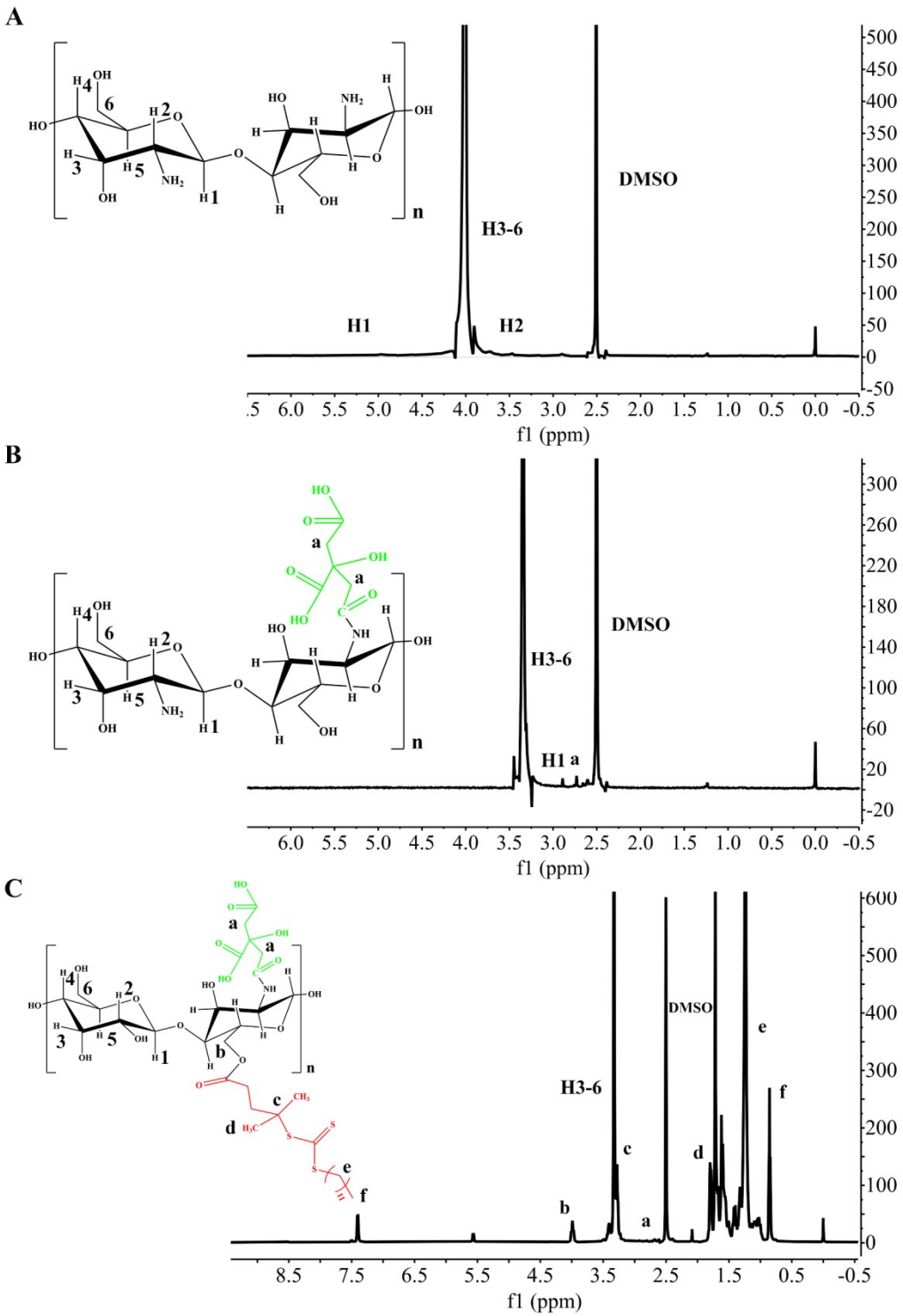

Fig. S2 ^{1}H NMR spectra of intermediate products.

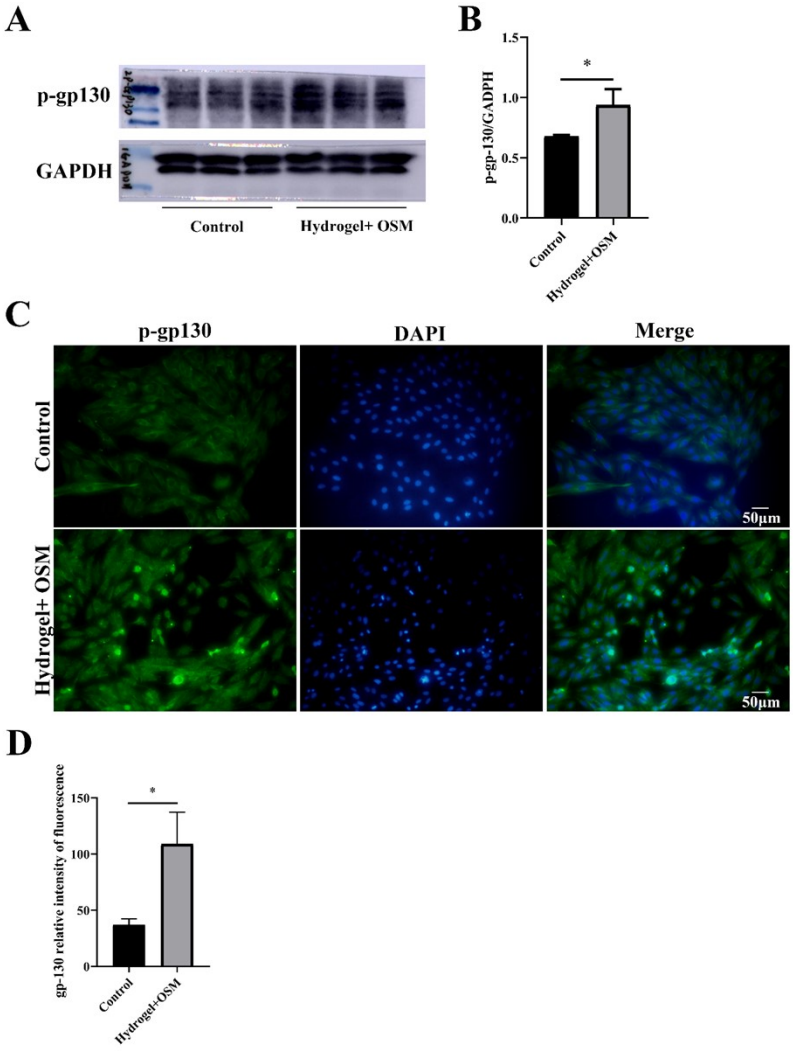

Fig. S3 OSM-loaded injectable hydrogel bioactivity test diagram.

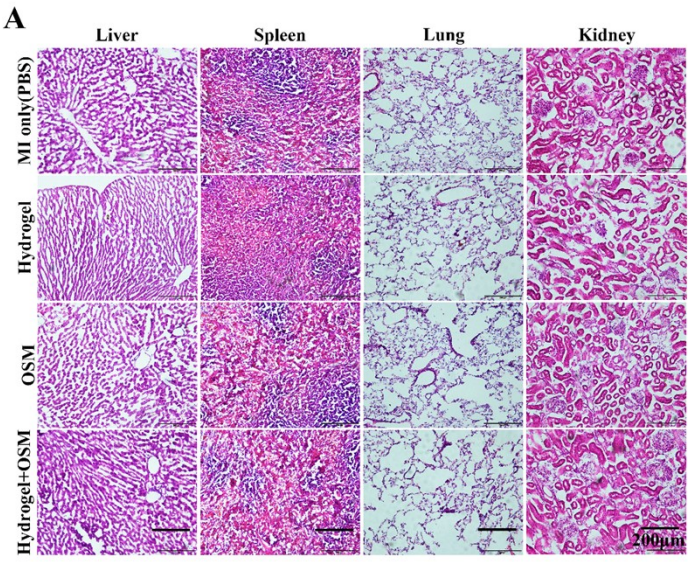

Fig. S4 Vital organs were observed by HE staining.