

Supporting Information

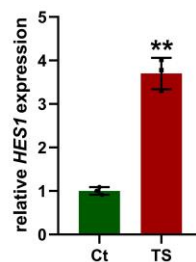
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Tensile Stress-Activated and Exosome-Transferred YAP/TAZ-Notch Circuit Specifies Type H Endothelial Cell for Segmental Bone Regeneration

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Table S1. Primer sequences for quantitative real-time polymerase chain reaction

Gene	Forward (5'-3')	Reverse (5'-3')
<i>YAP</i>	CAGGAGCCCTGACTCCACA G	TTGCCATCTCCCAACCTGCT
<i>TAZ</i>	GCTGGCTCTGATGGCTCTT A	AGACCTGTGACTAATGCTGC TG
<i>Notch1</i>	GGACCAGATTGGGGAGTT	CACACTCGTCCACATCGT
<i>Dll4</i>	ATTGCCAACAGCCTATCT	CCATCCTCCTGGTCCTTA
<i>HES1</i>	TCAACACGACACCGGATAA AC	GCCGCGAGCTATCTTTCTTC A
<i>Acta2</i>	AAAAGACAGCTACGTGGGT GA	GCCATGTTCTATCGGGTACT TC
<i>Cnn1</i>	CTGTCAGCCGAGGTTAAGA AC	GAGGCCGTCCATGAAGTTG TT
<i>GAPDH</i>	CTGGGCTACACTGAGCACC	AAGTGGTCGTTGAGGGCAA TG
<i>Notch1</i> promotor	TCGATCCTCTGGACGCCTA A	GCCTGGGACTACTTCTCGTT
<i>Dll4</i> promotor	TAGACCCTTAGCCCCTAGC C	ACCTAGTGTTCCAAAGCAG GT
<i>YAP</i> promotor	ACTTGTCCAAAACCTCACA GC	TGAACCCCCAGTTTCCTGTC
<i>TAZ</i> promotor	AGGCAGAGAGGGTTCAGG AT	TCAGGACTCAAAGGGGCTT G

**Figure S1** The gene expression of *HES1* in tensile stress (TS)-stimulated bone marrow

endothelial cells. $**P < 0.01$.

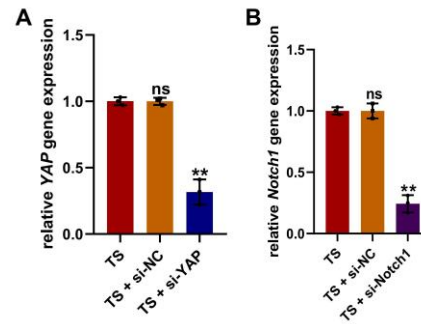


Figure S2 Verification of knockdown efficiency. A-B. The gene expression of *YAP* (A) and *Notch1* (B) in tensile stress (TS)-stimulated bone marrow endothelial cells upon knockdown of *YAP* or *Notch1* by siRNAs, respectively. $^{ns}P > 0.05$, $**P < 0.01$.

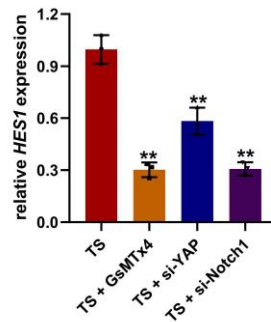


Figure S3 The gene expression of *HES1* after GsMTx4 treatment or knockdown of *YAP* or *Notch1* by siRNAs in tensile stress (TS)-stimulated bone marrow endothelial cells. $**P < 0.01$.

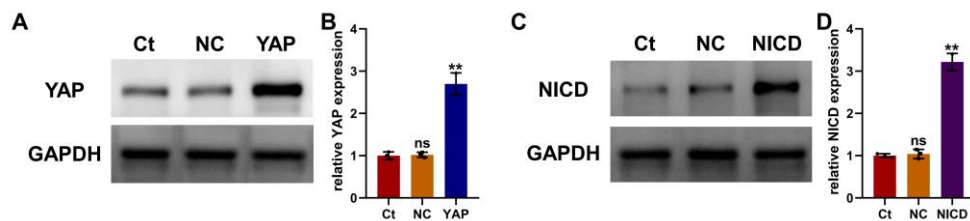


Figure S4 Verification of overexpression efficiency. A-B. Western blot images (A) and quantitative analysis (B) revealing the expression of YAP in transfected bone marrow endothelial cells (BMECs). **C-D.** Western blot images (C) and quantitative analysis (D) revealing the expression of NICD in transfected BMECs. $^{ns}P > 0.05$, $**P < 0.01$.

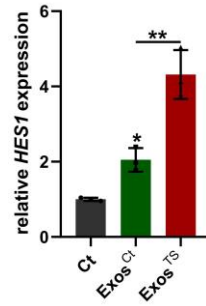


Figure S5 The gene expression of *HES1* in exosomes-treated bone marrow endothelial cells. * $P < 0.05$, ** $P < 0.01$.

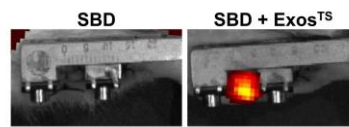


Figure S6 *In vivo* imaging system showing the retention of PKH67-labeled exosomes within the region of bone defect one week after the stereotactic injection.