Supplementary Material

Schistosoma japonicum sja-let-7 inhibits the growth of hepatocellular carcinoma cells via cross-species regulation of Col1α2

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Supplementary Figure S1

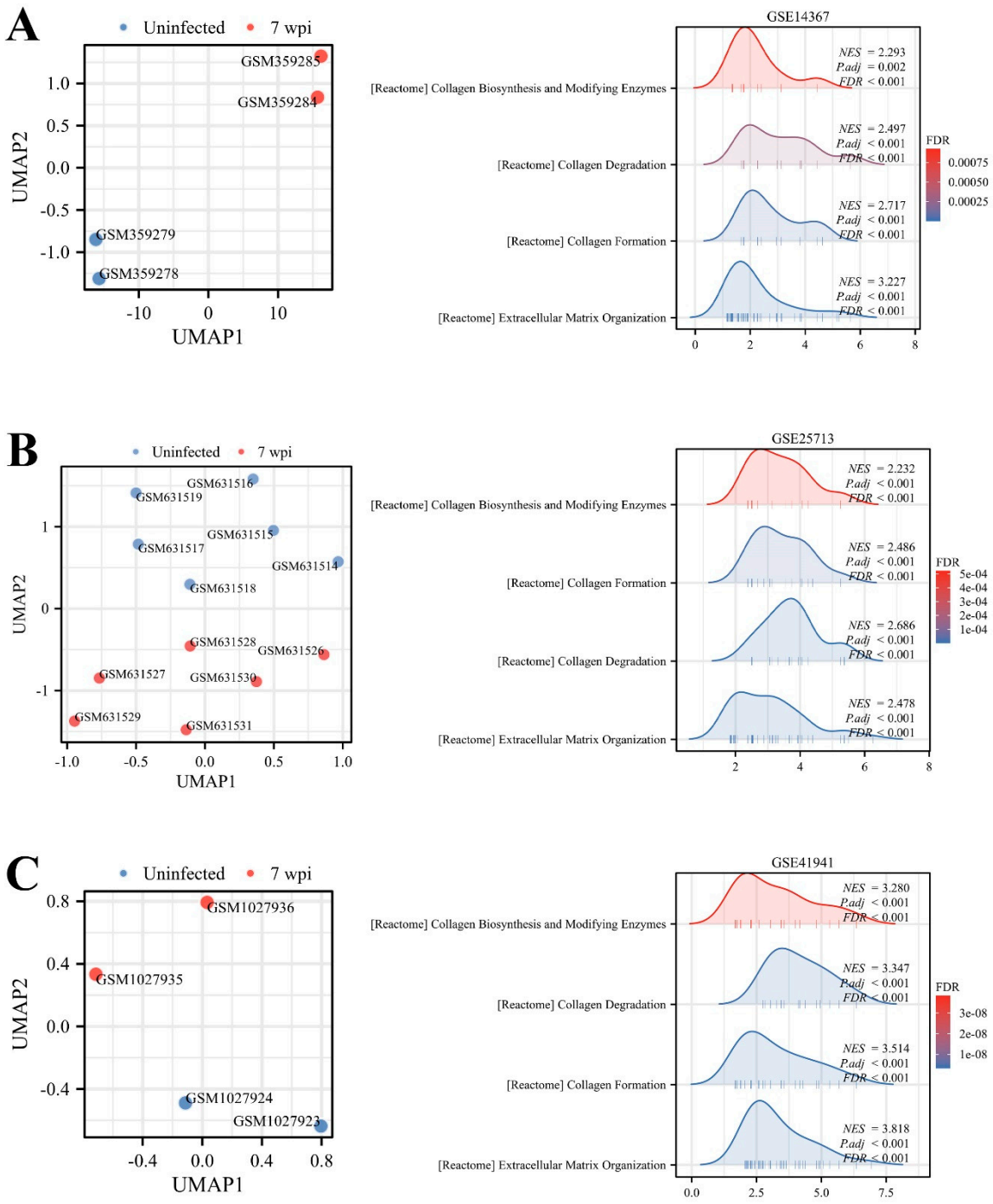
Supplementary Figure S2

2. Supplementary tables

Supplementary Table S1

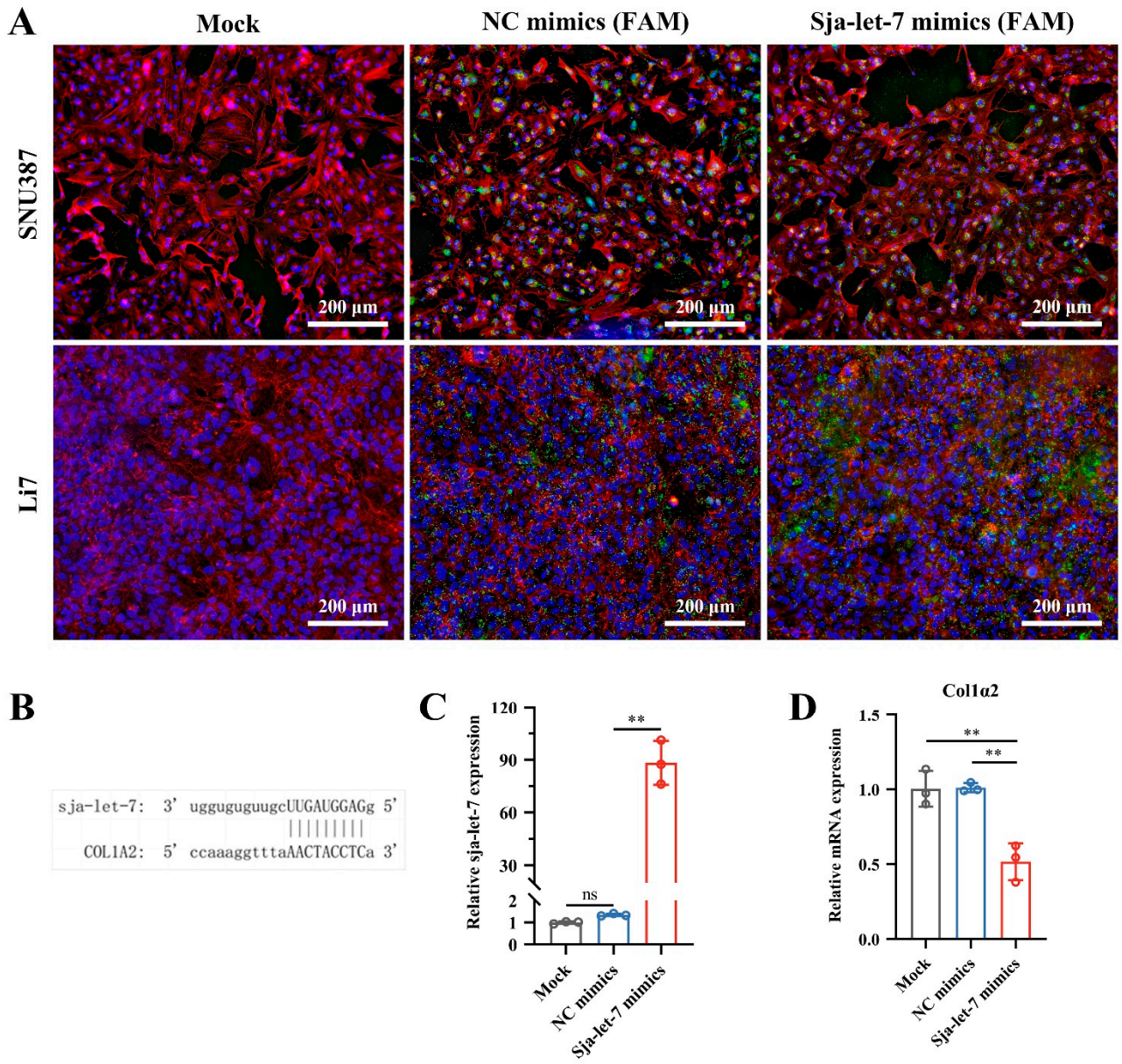
Supplementary Table S2

Supplementary figures and figure legends



Supplementary Figure S1. Overview of schistosome-induced fibrosis datasets

UMAP analysis, GSEA enrichment pathways, and gene expression details of GSE14367 (A), GSE25713 (B) and GSE41941 (C) datasets.



Supplementary Figure S2: Transfection efficiency and validation

(A) Fluorescence microscopy observation of SNU387 and Li7 cells after transfection with FAM-labeled NC/sja-let-7 mimics. (B) The binding site of sja-let-7 on the 3'UTR of Col1α2; (C) Sja-let-7 transfection efficiency in Li7 cell line (n=3); (D) Relative expression of Col1α2 in Li7 cell line (n=3). All graph data are expressed as the mean ± SD of at least three biological replicates per group. *P< 0.05, **P< 0.01, ns, not significant.

Supplementary tables

Supplementary Table S1 The sequence of miRNA mimics.

Name	Sense sequence (5'-3')	Anti-sense sequence (5'-3')
Sja-let-7 mimics	GGAGGUAGUUCGUUGUGUGGU	CACACAACGAACUACCUCCUU
NC mimics	UUCUCCGAACGUGUCACGUTT	ACGUGACACGUUCGGAGAATT

Supplementary Table S2 Primers used in the experiment.

Primer	Sequences (5'-3')
Human-GAPDH-F	GTCTCCTCTGACTTCAACAGCG
Human-GAPDH-R	ACCACCCTGTTGCTGTAGCCAA
Human-Col1α2-F	CTGGCACCACACCTTCTACAATG
Human-Col1α2-R	AATGTCACGCACGATTTCCCGC
Human-TGF-β-F	CAGCAACAATTCCTGGCGATA
Human-TGF-β-R	GCTAAGGCGAAAGCCCTCAAT
Human-TGF-βRI-F	ACGACTTAGTGAGGCATAGACATCC
Human-TGF-βRI-R	GGACCAGCAAGCAGGAGAGC
Human-Smad2-F	TGCCACGGTAGAAATGACAAGAAGG
Human-Smad2-R	GGGTGCCAGCCATATCTCTGATTAC
Human-Smad7-F	CTCGGAAGTCAAGAGGCTGTGTTG
Human-Smad7-R	TCTAGTTCGCAGAGTCGGCTAAGG
Mouse-GAPDH-F	AACGGGAAGCCCATCACCATC
Mouse-GAPDH-R	AAGACACCAGTAGACTCCACGA
Mouse-Col1α1-F	ACGTCCTGGTGAAGTTGGTC
Mouse-Col1α1-R	CAGGGAAGCCTCTTTCTCCT
Mouse-Col1α2-F	CCAGGGCTGTTTTCCCATCC
Mouse-Col1α2-R	GCTCTGTGCTTCGTCACCCA
Mouse-Col2α1-F	CCAACGGCGAGAAGGGAGAAG
Mouse-Col2α1-R	CGAATCCAGCAGGTCCAGGTG
Mouse-Col3α1-F	GCCCACAGCCTTCTACACCT
Mouse-Col3α1-R	GCCAGGGTCACCATTTCTC

Mouse-Col5α1-F	CCTACTCAGAAGCCAGTGGAAGC
Mouse-Col5α1-R	GTCCTCCTTGTCAGCCGTGTC
Mouse-Col5α2-F	CCCGTGGCAATCCTGGTTCTC
Mouse-Col5α2-R	TCTCCCTTCTGTCCTGGCTCTC
common-REVERSE	CAGTGCAGGGTCCGAGGT
U6-RT-primer	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACAAAAAT
U6-FORWARD	GAAGATTTAGCATGGCCCCTGC
sja-let-7-RT-primer	GTCGTATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGACACCACA
sja-let-7-FORWARD	ACAACAACGGAGGTAGTTCGT