

fig. S1.

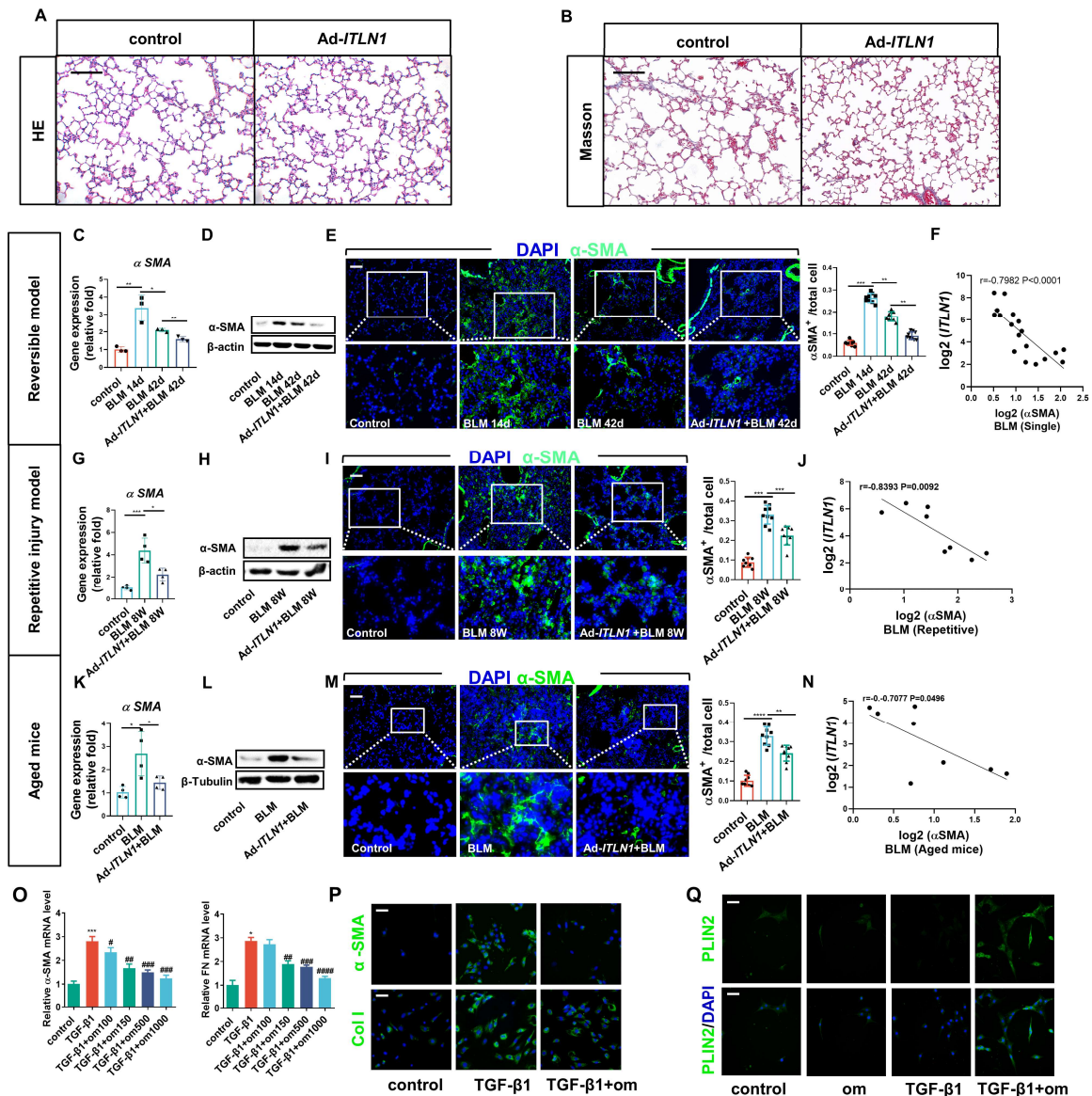


fig. S1. Effects of omentin-1 overexpression on lung tissue structure and myofibroblasts and omentin-1 on TGF- β 1-activated fibroblasts. (A and B) Representative micrographs of H&E and Masson staining of lung sections, scale bar = 50 μ m (n = 3). (C, G and K) The mRNA level of α -SMA in the lung tissue of mice detected by qPCR (n \geq 3). (D, H and L) The content of α -SMA in lung tissue detected by western blotting. β -actin or β -tubulin was used as the loading control (n = 3). (E, L and M) Immunofluorescent staining of α -SMA⁺ cells (myofibroblasts) and quantification of percentage of myofibroblasts in the lung according to immunofluorescent image, scale bar = 50 μ m (n \geq 3). (F, J and N) The correlation between α -SMA and omentin-1 mRNA level following BLM injury. (O) The mRNA level of α -SMA and FN in fibroblast detected by qPCR (n = 3). (P) Immunofluorescent staining of α -SMA (Green) in fibroblasts, scale bar = 50 μ m (n = 3). (Q) Immunofluorescent staining of PLIN2(Green) in fibroblasts, scale bar = 50 μ m (n = 3).

fig. S2.

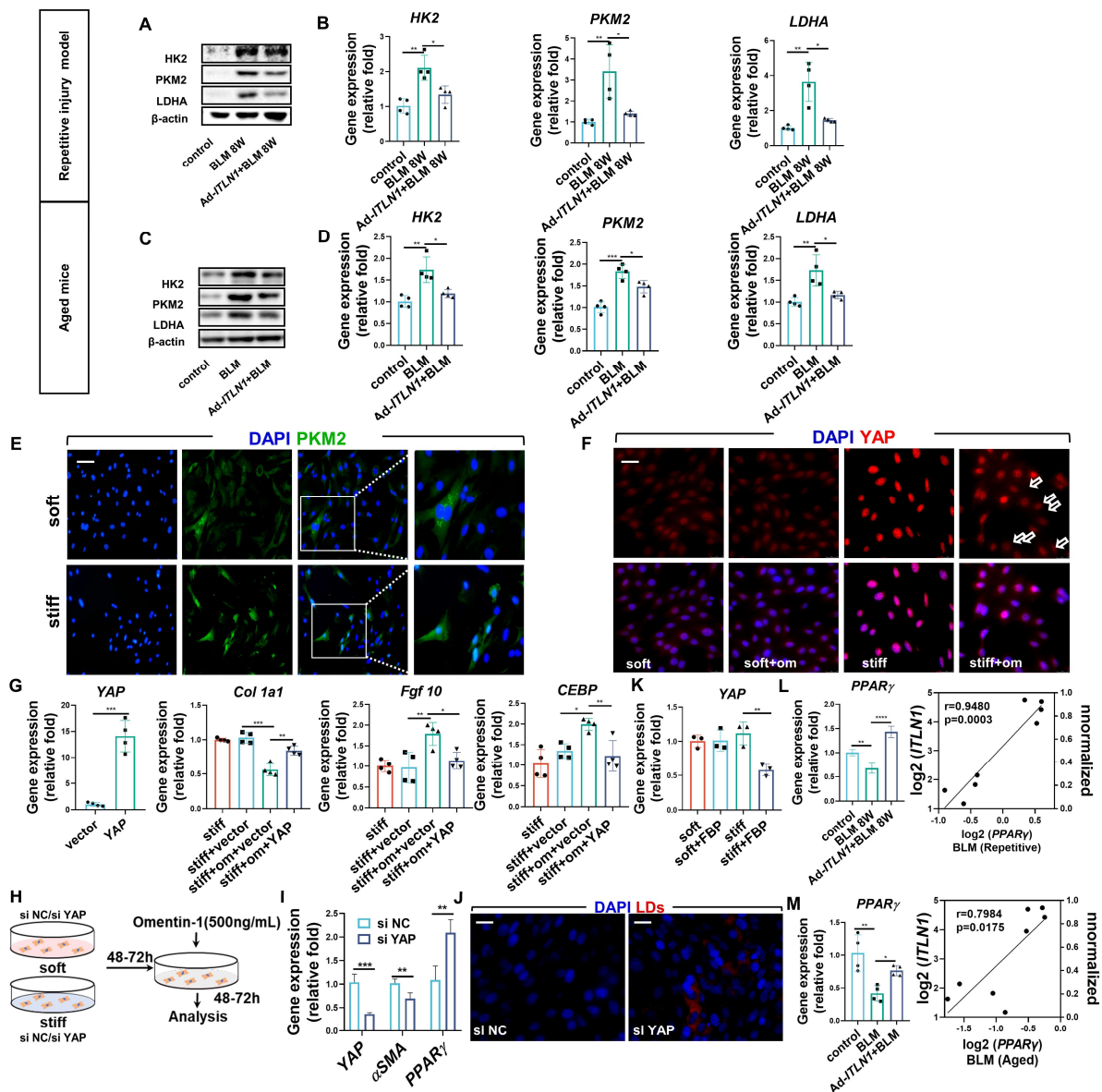


fig. S2. Effect of Omentin-1 on glycolysis, YAP and PPAR γ . (A and C) The content of HK2, PKM2 and LDHA in the non-reversible fibrotic lung tissue detected by western blotting (n = 3). (B and D) The mRNA level HK2, PKM2 and LDHA in the non-reversible fibrotic lung tissue detected by qPCR (n = 4). (E) Subcellular locations of PKM2 in fibroblasts, scale bar = 50 μ m (n = 3). (F) The expression of YAP in nucleus of fibroblasts, scale bar = 50 μ m (n = 3). (G) The mRNA level of YAP gene overexpression, fibrosis genes Col1 and lipogenic genes (Fgf10 and CEBP) in negative control (vector) or YAP plasmid transfected fibroblasts detected by qPCR (n = 4). (H) Schematic for fibroblasts activated by stiff matrix transfected with specific siRNA and treated with omentin-1. (I) The mRNA level of YAP, α -SMA and PLIN2 in si NC or si YAP transfected fibroblasts detected by qPCR (n = 4). (J) Staining of Lipid droplets with Nile red in fibroblasts, scale bar = 50 μ m (n = 3). (K) The mRNA level of YAP in fibroblasts with FBP treatment detected by qPCR (n = 3). (L and M) The mRNA level of PPAR γ in the non-reversible fibrotic lung tissue of mice detected by qPCR (n = 4) and the correlation between PPAR γ and omentin-1 mRNA levels in the non-reversible fibrosis model following BLM injury.

fig. S3.

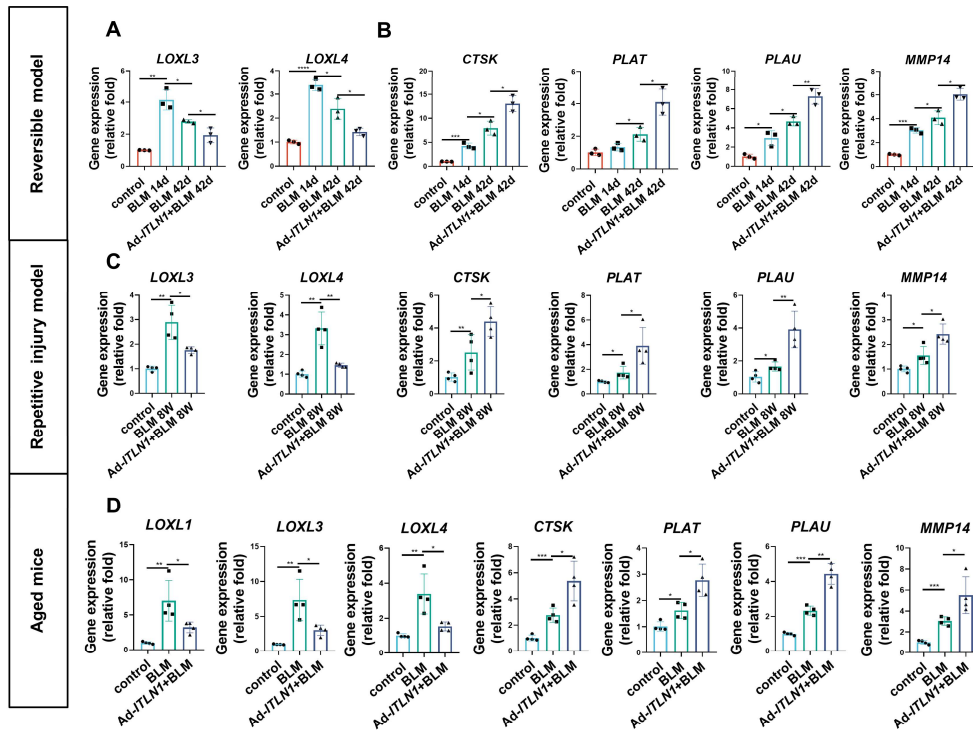


fig. S3. Effects of omentin-1 on collagen synthesis and degradation related genes in reversible and non-reversible fibrosis. (A-D) The mRNA level of ECM synthesis and degradation associated genes in the reversible and non-reversible fibrotic lung tissue detected by qPCR ($n \geq 3$).

Table S1. Polymerase chain reaction primers used in this study.

	Sequence
<i>omentin-1</i>	F: AGTGCAGCTGAAGAGAACCT, R: ACTTCCCACGCATGTTGTTC
<i>α-SMA</i>	F: CTTCGCTGGTGATGATGCTC, R: GTTGGTGATGATGCCGTGTT
<i>Col 1</i>	F: GAGCGGAGAGTACTGGATCG, R: GCTTCTTTTCCTTGGGGTTC
<i>Col 3</i>	F: GCACAGCAGTCCAACGTAGA, R: TCTCAAATGGGATCTCTGG
<i>FN</i>	F: CCGACCAGAAGTTTGGGTCT, R: CAATGCGGTACATGACCCCT
<i>PLIN2</i>	F: GACCTTGTGTCCTCCGCTTAT, R: CAACCGCAATTTGTGGCTC
<i>HK2</i>	F: TGATCGCCTGCTTATTCACGG, R: AACCGCCTAGAAATCTCCAGA
<i>PKM2</i>	F: GCCGCCTGGACATTGACTC, R: CCATGAGAGAAATCAGCCGAG
<i>LDHA</i>	F: TGTCTCCAGCAAAGACTACTGT, R: GACTGTACTTGACAATGTTGGGA
<i>YAP1</i>	F: CTCTGAGTGATCCTCTGGTTC, R: CCATAAGAACAAGACCACATCCT
<i>FGF10</i>	F: ATGACTGTTGACATCAGACTCCTT, R: CACTGTTCAAGCCTTTTGAGGA
<i>CEBP</i>	F: CAAGAACAGCAACGAGTACCG, R: GTCACTGGTCAACTCCAGCAC
<i>PPARγ</i>	F: TGAATCCAGAGTCCGCTGACCTC, R: ATCGCCCTCGCCTTTGCTTTG
<i>LOX</i>	F: TCTTCTGCTGCGTGACAACC, R: GAGAAACCAGCTTGAACCAG
<i>LOXL1</i>	F: TGCCCGACAACCTGGAGAGA, R: TGC GGATAGGGGAACTGCT
<i>LOXL3</i>	F: CTACTGCTGCTACACTGTCTGT, R: GACCTTCATAGGGCTTTCTAGGA
<i>LOXL4</i>	F: GTGCCAAGTATGGTCAAGGAG, R: CCGTTAGAGCCACACTGATCT
<i>PLAT</i>	F: AACGCAGACAACCTTACCAACA, R: GTTCGCTGCAACTTCGGAC
<i>CTSK</i>	F: GAAGAAGACTCACCAGAAGCAG, R: TCCAGGTTATGGGCAGAGATT
<i>MMP14</i>	F: CAGTATGGCTACCTACCTCCAG, R: GCCTTGCCTGTCACTTGTAAG
<i>PLAU</i>	F: GCGCCTTGGTGGTGAAAAAC, R: TTGTAGGACACGCATACACCT