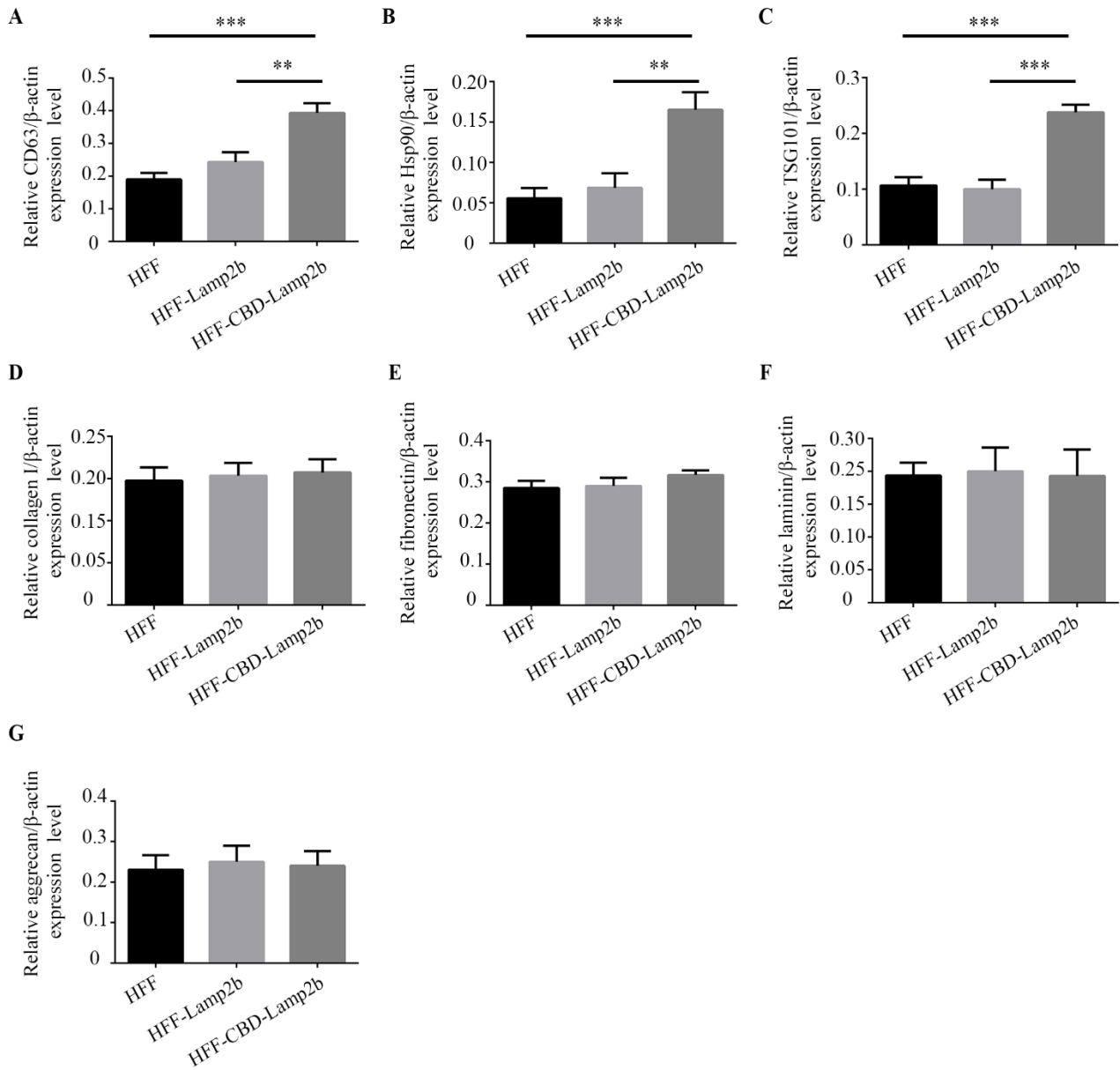


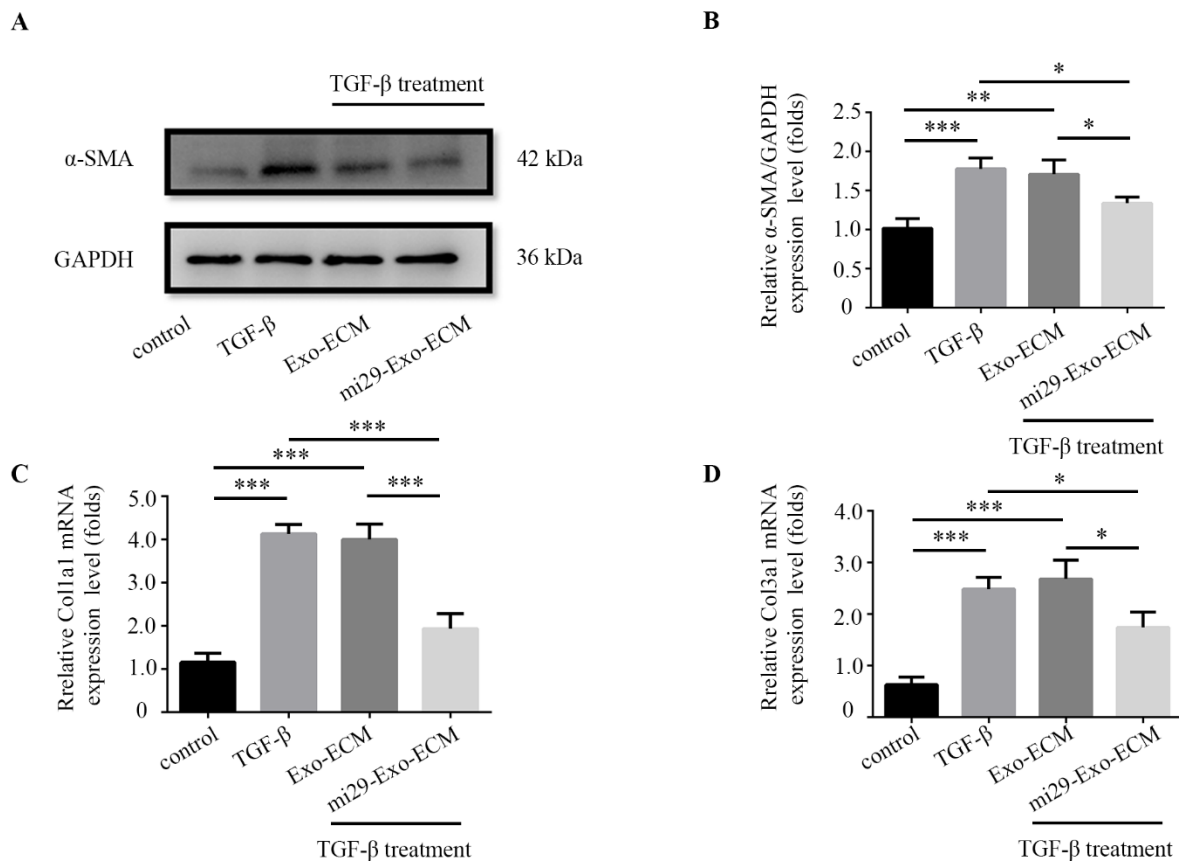


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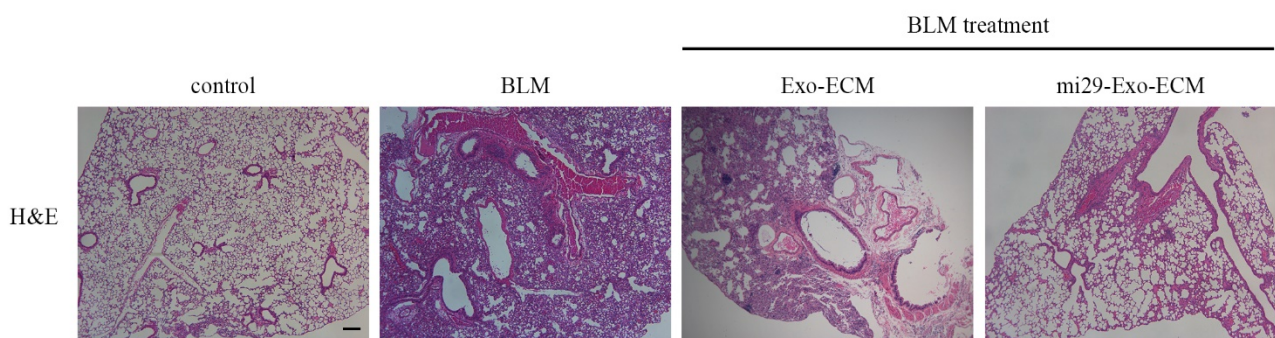
SUPPLEMENTARY FIGURE S1 The expression cassette of the modified Lamp2b protein. SP: signal peptide; CBD: collagen-binding domain; Lamp2b: lysosomal associated membrane protein 2b. (green color means SP; blue color means CBD; red color means Lamp2b).



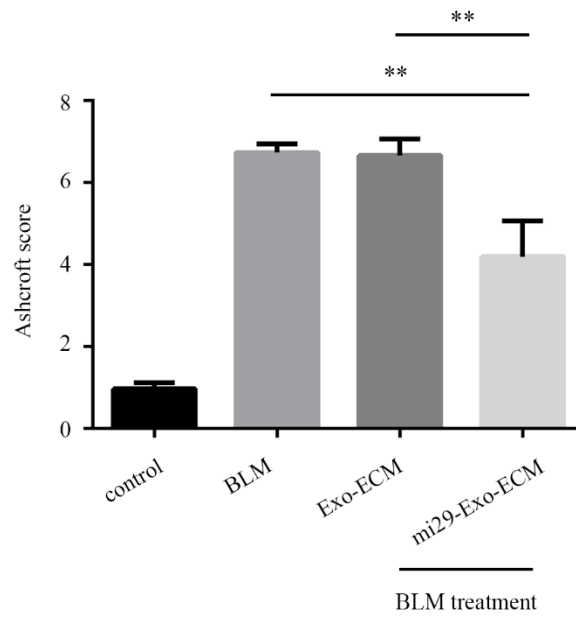
SUPPLEMENTARY FIGURE S2 Relative expression levels of CD63 (A), Hsp90 (B), TSG101 (C), collagen I (D), fibronectin (E), laminin (F) and aggrecan (G) were quantified. The β -actin was used as an internal control. Data are represented as mean \pm SD (n = 3). ANOVA was performed; “***” : $p < 0.01$; “****” : $p < 0.001$.



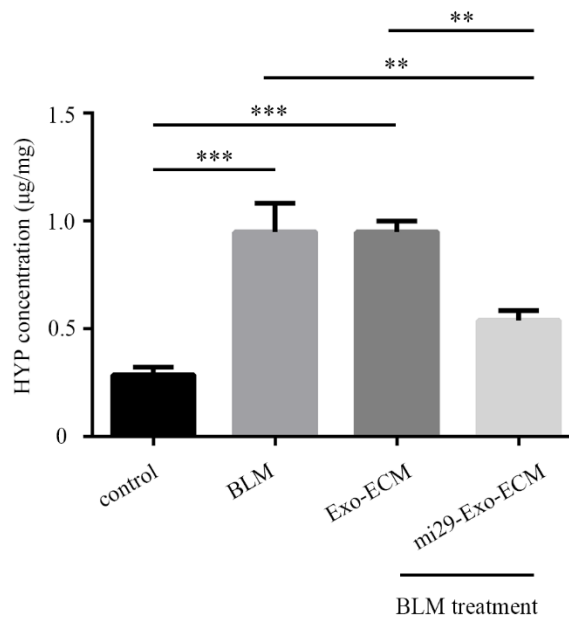
SUPPLEMENTARY FIGURE S3 The change of α -SMA protein level was analyzed by Western blot (A). Relative expression level of α -SMA were quantified (B). The GAPDH was used as an internal control. mRNA levels of Col1a1 (C) and Col3a1 (D) were determined by qRT-PCR. “control”: NIH 3T3 cells; “TGF- β ”: TGF- β -induced NIH 3T3 cells; “Exo-ECM”: Exo-ECM treatment; “mi29-Exo-ECM”: mi29-Exo-ECM treatment; Data are represented as mean \pm SD (n = 3). ANOVA was performed; “*” : $p < 0.05$; “***” : $p < 0.01$; “*****” : $p < 0.001$.



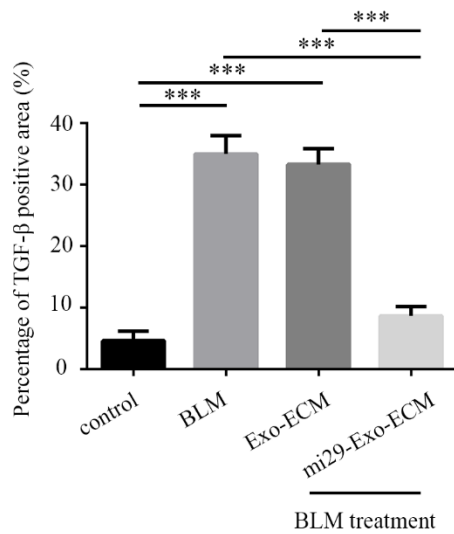
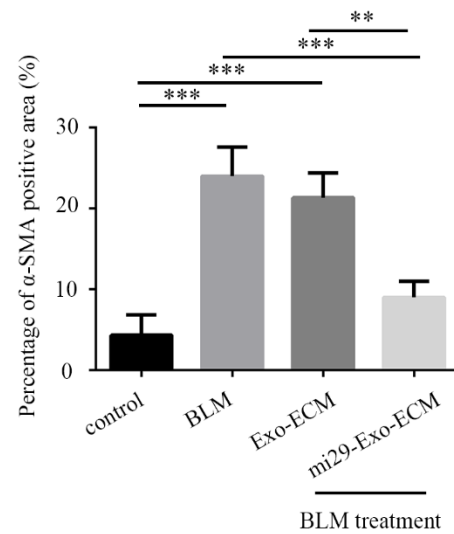
SUPPLEMENTARY FIGURE S4 The images of H&E staining with 40X magnification. Scale bar = 500 μ m. “control”: no treatment mice; “BLM”: bleomycin-induced pulmonary fibrosis mice model; “Exo-ECM”: Exo-ECM treatment; “mi29-Exo-ECM”: mi29-Exo-ECM treatment.



SUPPLEMENTARY FIGURE S5 The Ashcroft score of H&E staining from pulmonary fibrosis mice model. “control”: no treatment mice; “BLM”: bleomycin-induced pulmonary fibrosis mice model; “Exo-ECM”: Exo-ECM treatment; “mi29-Exo-ECM”: mi29-Exo-ECM treatment; Data are represented as mean ± SD (n = 5). ANOVA was performed; “***” : $p < 0.01$.



SUPPLEMENTARY FIGURE S6 The HYP concentration of lungs from pulmonary fibrosis mice model. “control”: no treatment mice; “BLM”: bleomycin-induced pulmonary fibrosis mice model; “Exo-ECM”: Exo-ECM treatment; “mi29-Exo-ECM”: mi29-Exo-ECM treatment; Data are represented as mean ± SD (n = 5). ANOVA was performed; “***” : $p < 0.01$; “***” : $p < 0.001$.

A**B**

SUPPLEMENTARY FIGURE S7 The percentage of TGF-β (**A**) and α-SMA (**B**) positive area (%) from IHC. “control”: no treatment mice; “BLM”: bleomycin-induced pulmonary fibrosis mice model; “Exo-ECM”: Exo-ECM treatment; “mi29-Exo-ECM”: mi29-Exo-ECM treatment; Data are represented as mean ± SD (n = 5). ANOVA was performed; “***” : $p < 0.01$; “****” : $p < 0.001$.

SUPPLEMENTARY TABLE S1 The primers for PCR

Genes	Application	Primer Sequences
Lamp2b	cDNA clone	Fd: 5'-CCGACTAGTGCCACCATGGTGTGCTTCCGCCTCT-3' Re: 5'-CGCGCGGCCGCTTACAGAGTCTGATATCCAGCATAACTT-3'
CBD-Lamp2b	cDNA clone	Fd: 5'-CCGACTAGTGCCACCATGGTGTGCTTCCGCCTCT-3' Re: 5'-CGCGCGGCCGCTTACAGAGTCTGATATCCAGCATAACTT-3' Fd: 5'-ACCAAGAAGACCCTGAGAACCGGCAGTGGATCTGGATCCG-3' Re: 5'-GGTTCTCAGGGTCTTCTTGGTTCCACTGCCCATAGTCGAGTTAC-3'
miRNA-29	cDNA clone	Fd: 5'-CCGGTAACCGATTTCAAATGGTGCTACTCGAGTAGCACCA

		TTTGAAATCGGTTATTTTTTG-3'
		Re:
		5'-AATTCAAAAATAACCGATTTCAAATGGTGCTACTCGAGT AGCACCATTTGAAATCGGTTA-3'
Lamp2b	qRT-PCR	Fd: 5'-GCTGTGAAAAATGAAAACCGATT-3' Re: 5'-AGCTGAGATTGTTATTTGCAATGC-3'
GAPDH	qRT-PCR	Fd: 5'-ACCCACTCCTCCACCTTTGA-3' Re: 5'-TGTTGCTGTAGCCAAATTCGTT-3'
miRNA-29	qRT-PCR	Fd: 5'-CTGGTAGGTAGCACCATTTGAAAT-3' Re: 5'-AACTGGTGTCGTGGAGTCGG-3'
U6	qRT-PCR	Fd: 5'-CTCGCTTCGGCAGCACA-3' Re: 5'-AACGCTTCACGAATTTGCGT-3'
miRNA-29	RT-PCR	5'-CTCAACTGGTGTCGTGGAGTCGGCAATTCAGTTGAGTAA CCGAT-3'

Note: "Fd": forward primer; "Re": reverse primer