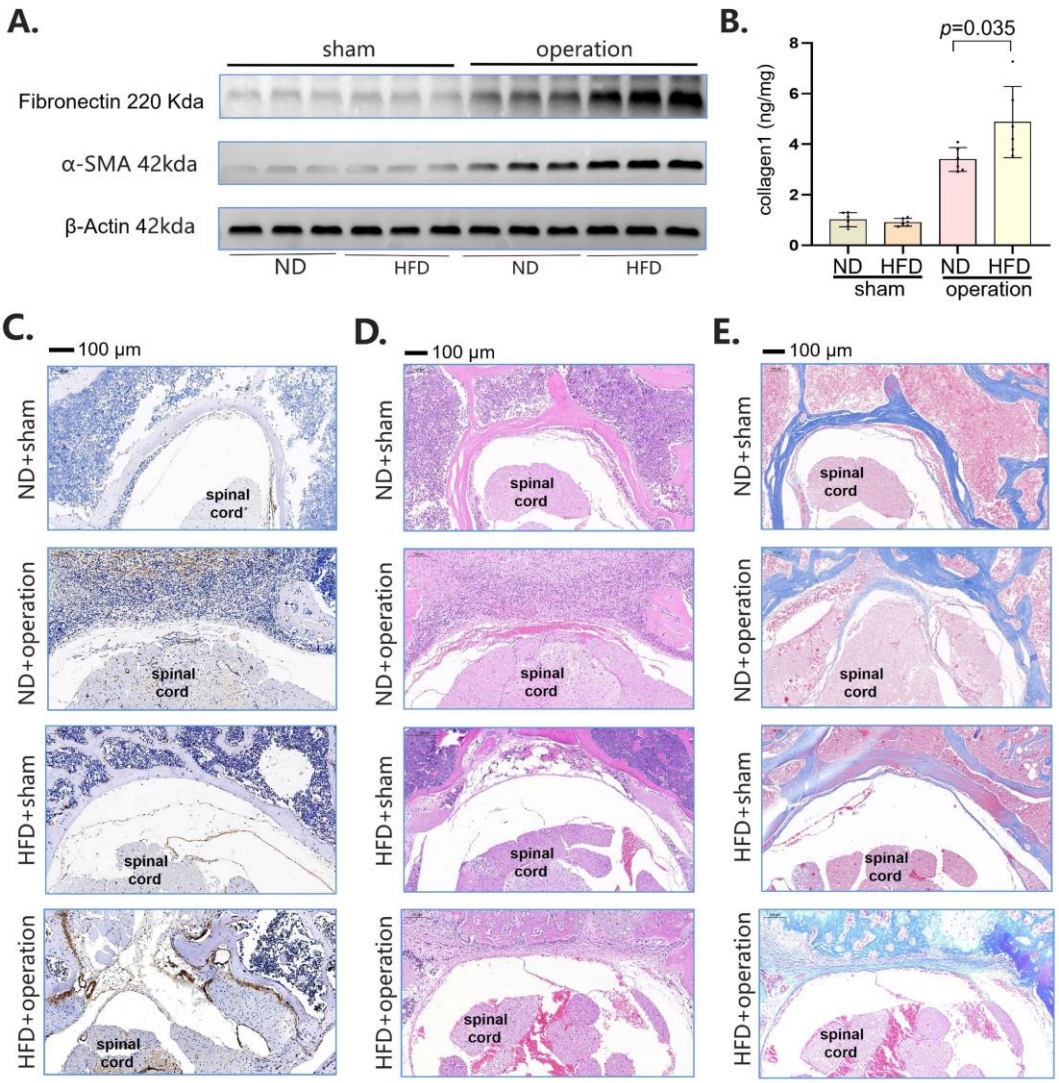
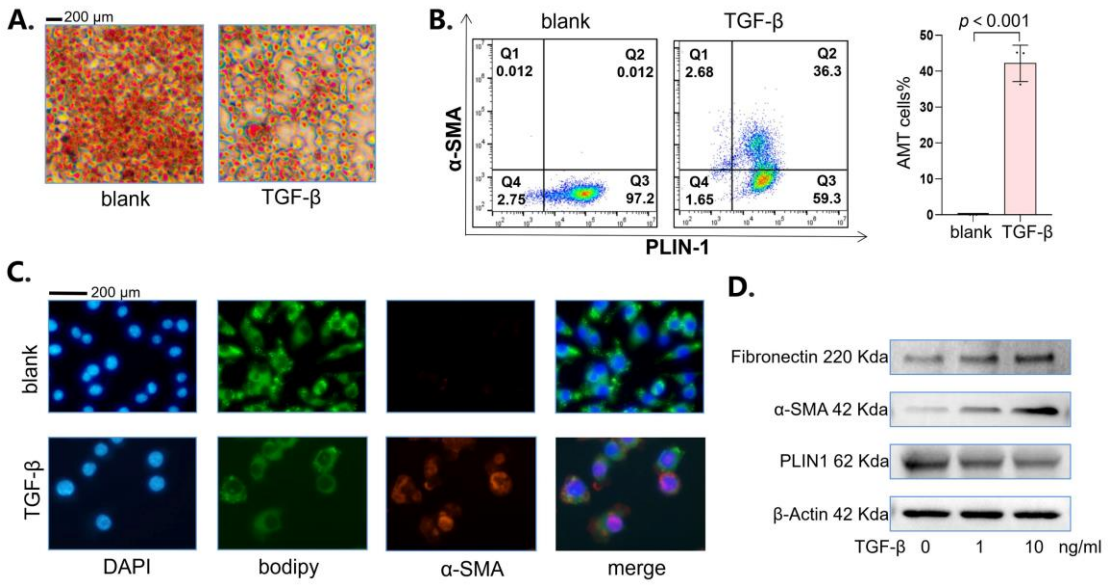
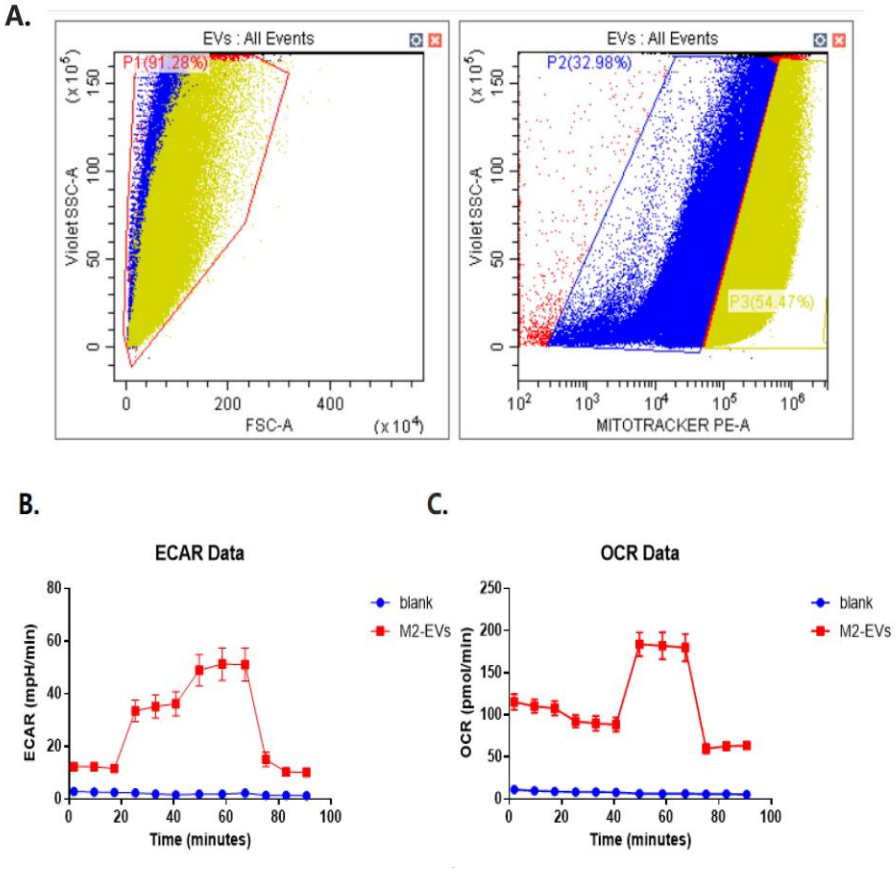


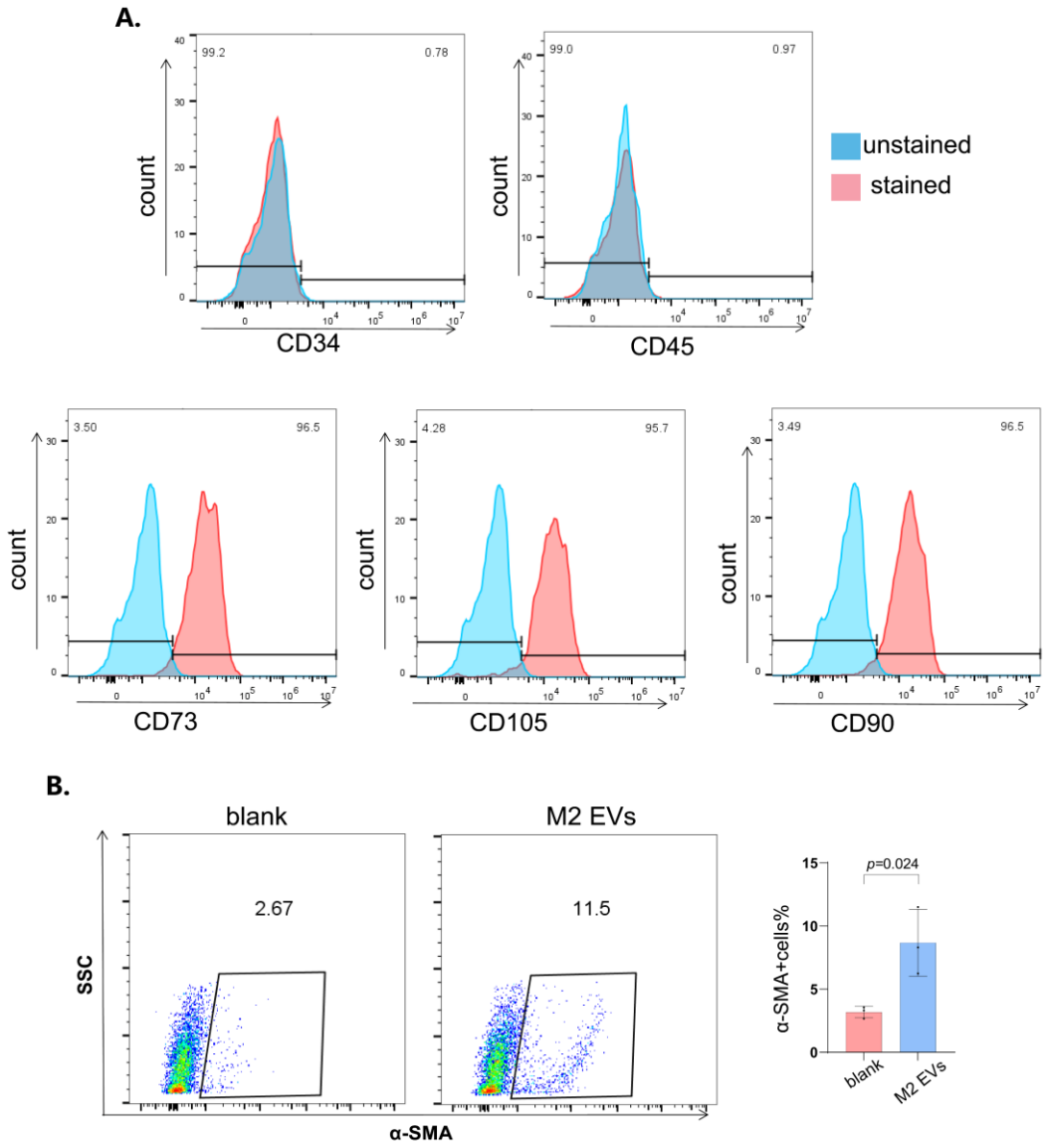
Supplementary Figure 1. HFD promoted epidural fibrosis. (A) Western blot analysis of fibronectin and α-SMA in obese mice induced with a high-fat diet and normal control mice. (B) ELISA analysis of collagen-1 in obese mice fed a high-fat diet and normal control mice. (C) Immunohistochemical staining of α-SMA (brown) in obese mice induced by a high-fat diet and normal control mice. (D) HE staining of obese mice induced with a high-fat diet and normal control mice. (E) Masson's trichrome staining of the obese mice fed a high-fat diet and normal control mice. All the data are presented as the mean ± Standard Error of the Mean (SEM).



Supplementary Figure 2. TGF-β promoted fibrosis in adipocytes. (A) Oil Red O staining of adipocytes treated with or without TGF-β. (B) PLIN1 and α-SMA expression in adipocytes was detected via flow cytometry. On the left are typical images of flow cytometry, and on the right is the statistical graph after the experiment was repeated three times. (C) Immunofluorescence images of PLIN1 and α-SMA in adipocytes treated with or without TGF-β. (D) Western blot analysis of fibronectin, α-SMA and PLIN1 in adipocytes treated with different doses of TGF-β. All the data are presented as the mean ± Standard Error of the Mean (SEM).



Supplementary Figure 3. Vesicle sorting and metabolic intervention in adipocytes. (A) Vesicles were stained with MitoTracker Red and then sorted by flow cytometry according to MitoTracker expression. (B) ECAR levels in adipocytes were detected with a Seahorse assay after treatment with M2-EVs. (C) OCRs in adipocytes were detected with a Seahorse assay after treatment with M2-EVs. All the data are presented as the mean ± Standard Error of the Mean (SEM).



Supplementary Figure 4. Mesenchymal stem cells can transdifferentiate into myofibroblasts. (A) Mesenchymal stem cells purified from mouse bone marrow were identified with the markers CD34, CD45, CD73, CD105, and CD90. (B) α-SMA expression in mesenchymal stem cells was detected via flow cytometry. All the data are presented as the mean ± Standard Error of the Mean (SEM).

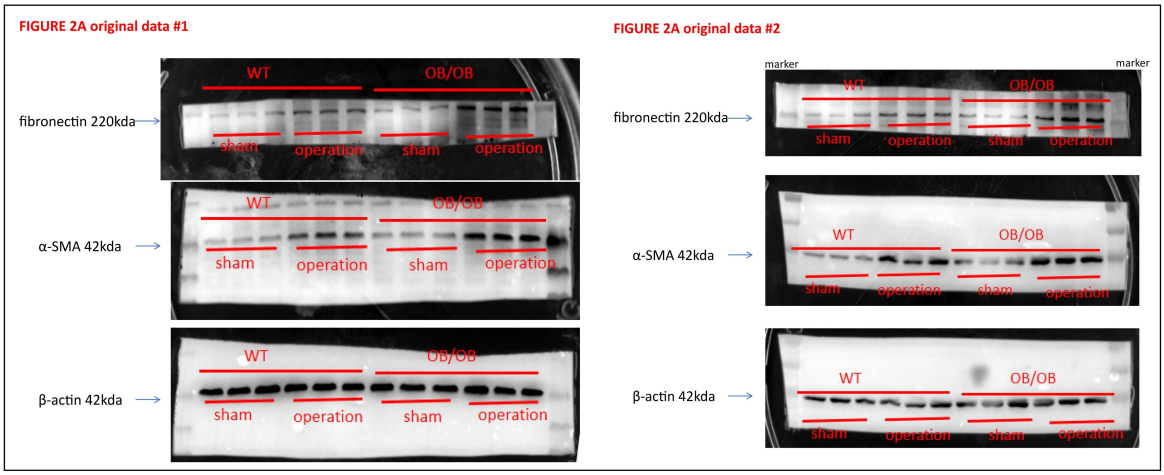


FIGURE 2A original data #1
fibronectin 220kda
α-SMA 42kda
β-actin 42kda
WT
OB/OB
sham
operation
sham
operation
FIGURE 2A original data #2
marker
marker
fibronectin 220kda
α-SMA 42kda
β-actin 42kda
WT
OB/OB
sham
operation
sham
operation

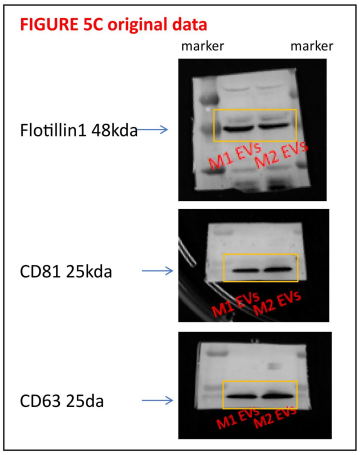


FIGURE 5C original data
marker
marker
Flotillin1 48kda
CD81 25kda
CD63 25da
M1 EVs
M2 EVs

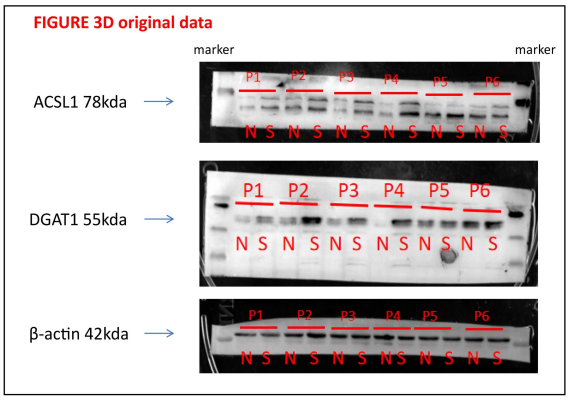


FIGURE 3D original data
marker
marker
ACSL1 78kda
DGAT1 55kda
β-actin 42kda
P1 P2 P3 P4 P5 P6
N S N S N S N S N S N S

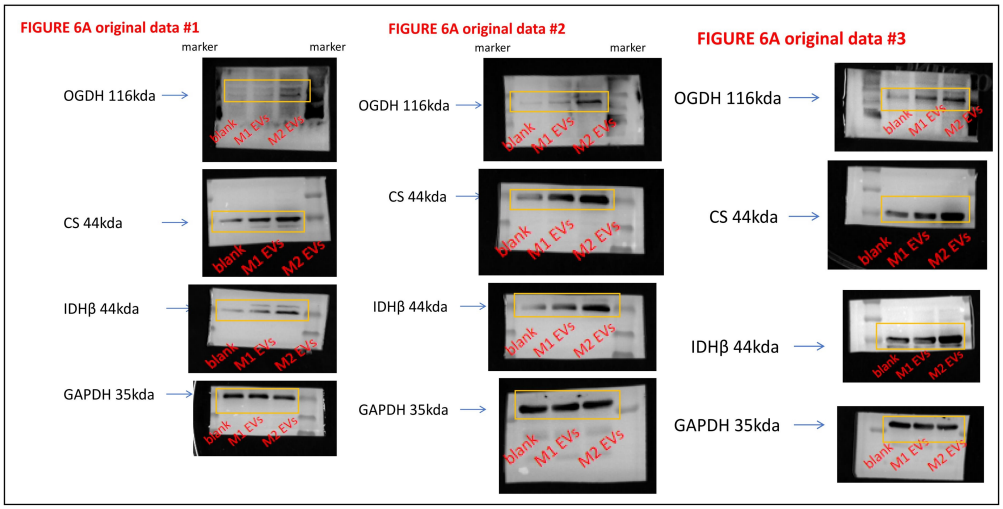


FIGURE 6A original data #1
FIGURE 6A original data #2
FIGURE 6A original data #3
marker
marker
OGDH 116kda
CS 44kda
IDHβ 44kda
GAPDH 35kda
blank
M1 EVs
M2 EVs

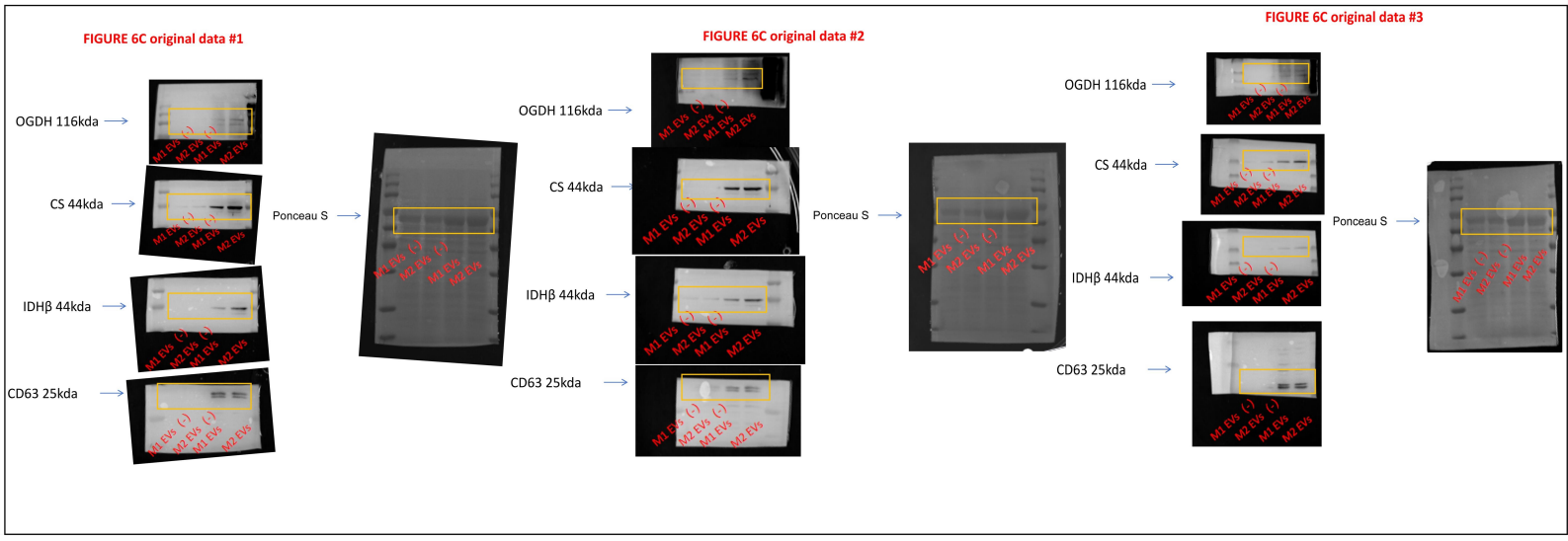


FIGURE 6C original data #1
FIGURE 6C original data #2
FIGURE 6C original data #3
OGDH 116kda
CS 44kda
IDHβ 44kda
CD63 25kda
Ponceau S
M1 EVs
M2 EVs

FIGURE 7G original data #1

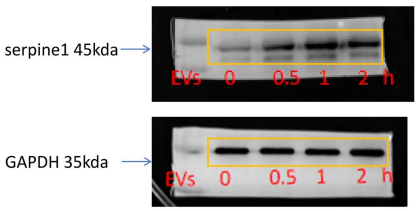


FIGURE 7G original data #2

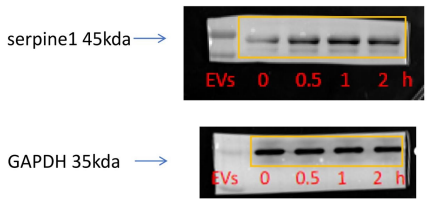


FIGURE 7G original data #3

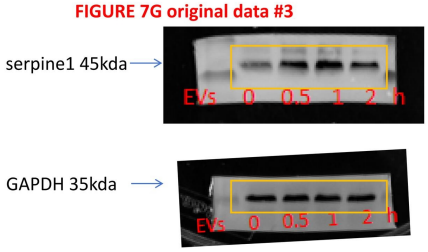


FIGURE 7H original data #1

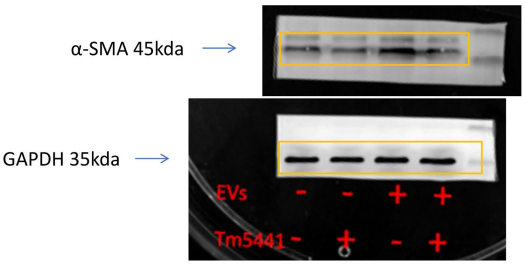


FIGURE 7H original data #2

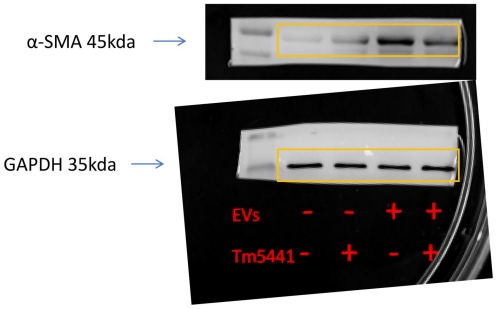
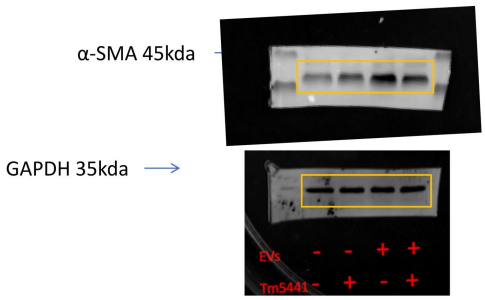
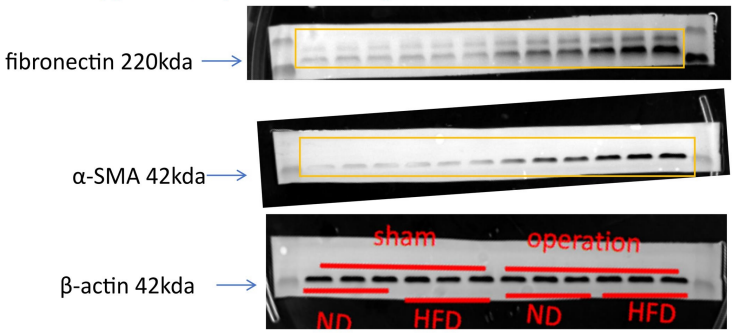


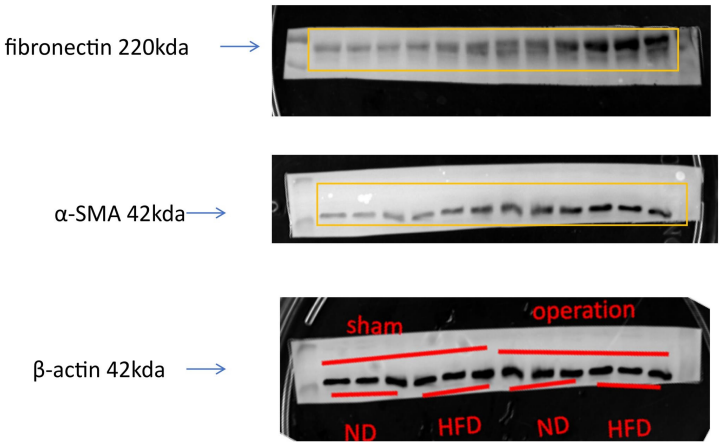
FIGURE 7H original data #3



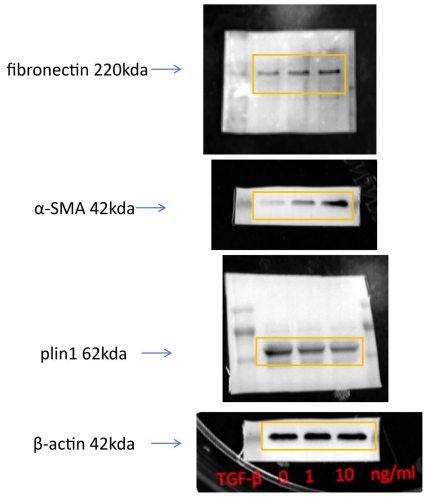
supplementary FIGURE 1A original data #1



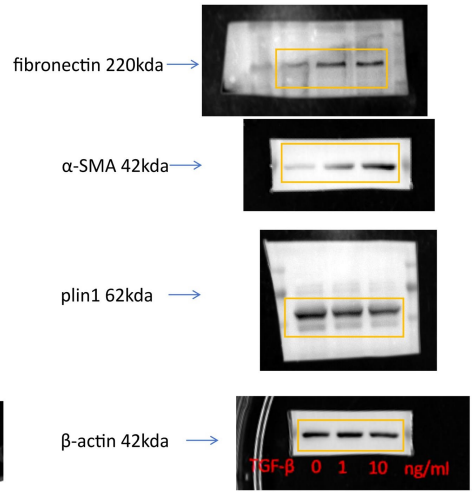
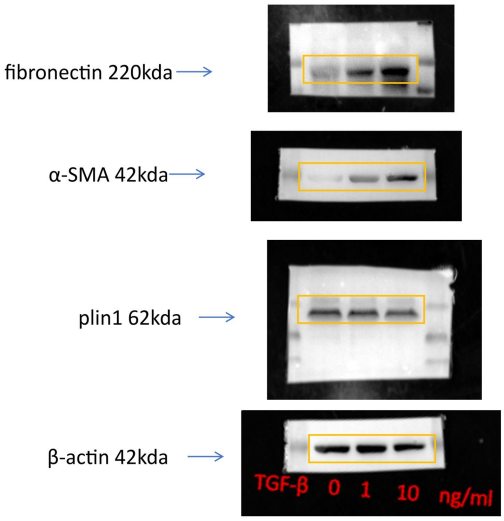
supplementary FIGURE 1A original data #2



supplementary FIGURE 2D original data #1



supplementary FIGURE 2D original data #2



supplementary FIGURE 2D original data #3