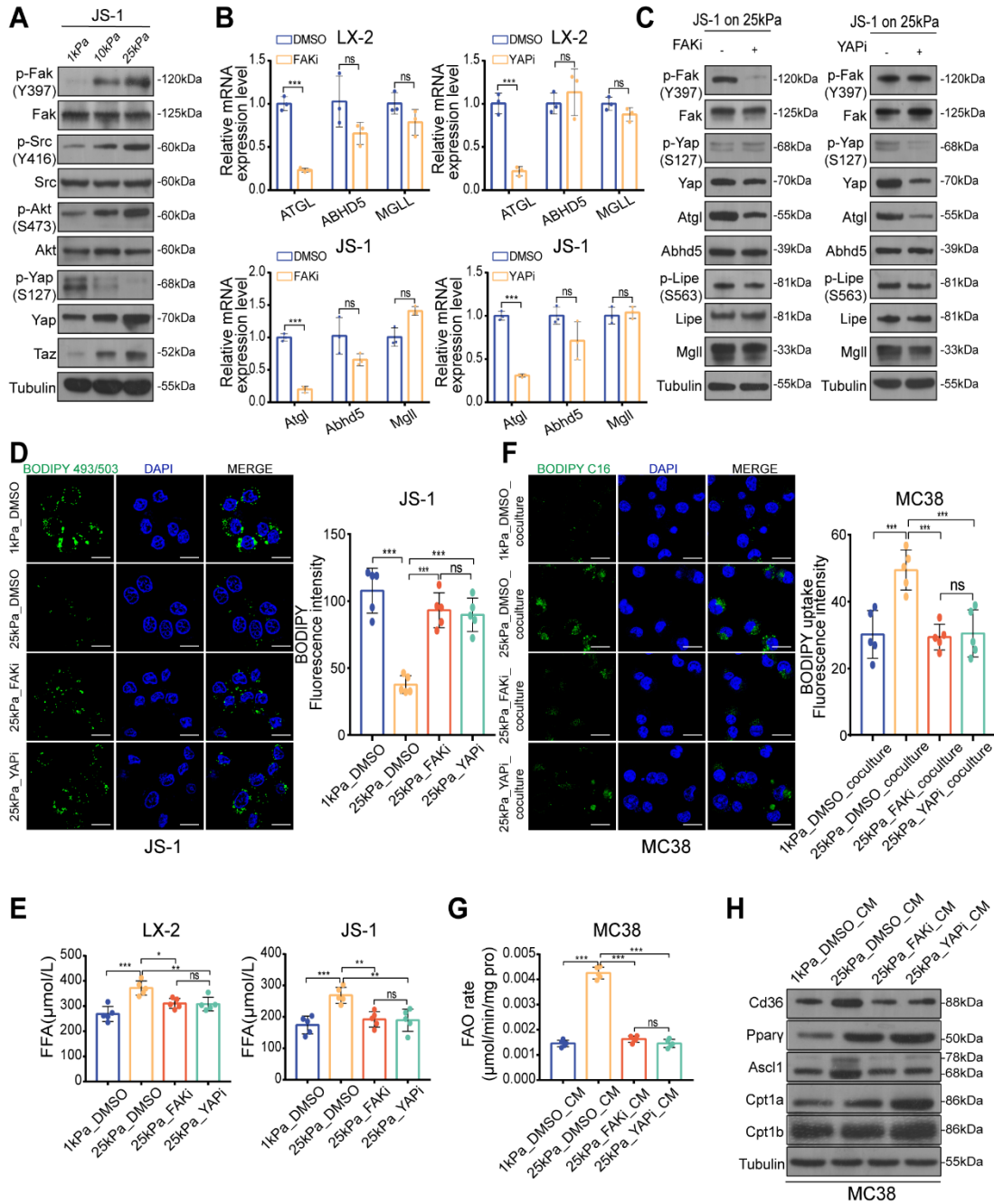


Supplementary Fig. S7



Supplementary Figure. S7 Matrix stiffness induces lipolysis in HSCs via activating the FAK-YAP signaling pathway. (A) Protein levels of total Fak, phosphorylated Fak, total Src, phosphorylated Src, total Akt, phosphorylated Akt, total Yap, phosphorylated Yap, and Taz in JS-1 cells cultured on 1kPa, 10kPa and 25kPa polyacrylamide hydrogels. **(B)** Relative mRNA levels of lipolysis related genes in LX-2 and JS-1 cells cultured on 25kPa polyacrylamide hydrogels treated with DMSO, 10 μ M FAK inhibitor (FAKi) PF-573228 or 0.1 μ M YAP inhibitor verteporfin (YAPi) for 24 h (Student's *t*-test, *n*=3 independent experiments). **(C)** Protein levels of total Fak, phosphorylated Fak, total Yap, phosphorylated Yap, Atgl, Abhd5, total Lipe, phosphorylated Lipe and Mgl1 protein levels in JS-1 cells treated as indicated. **(D)** Representative images (left) and quantification (right) of lipid level in JS-1 cells with indicated

treatment. Scale bar: 5 μ m (one-way ANOVA, n=5 independent experiments). **(E)** FFA content in supernatant from LX-2 and JS-1 cells with indicated treatment (one-way ANOVA, n=5 independent experiments). **(F)** Representative images (left) and quantification (right) of labelled lipids in MC38 cells after co-culturing with JS-1 cells treated as indicated. Scale bar: 5 μ m (one-way ANOVA, n=5 independent experiments). **(G)** Fatty acid oxidation rate of MC38 cells treated with indicated conditioned medium (one-way ANOVA, n=5 independent experiments). **(H)** Protein levels of Cd36, Ppar γ , Acs11, Cpt1a and Cpt1b in MC38 cells treated with indicated conditioned medium from JS-1 cells. Data are graphed as the mean \pm SD. ns, not significant, $P > 0.05$; * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.