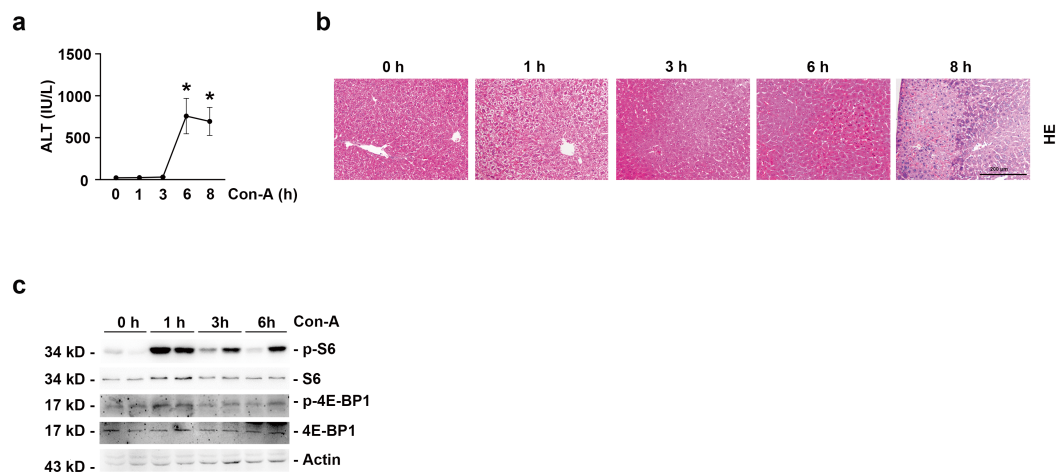
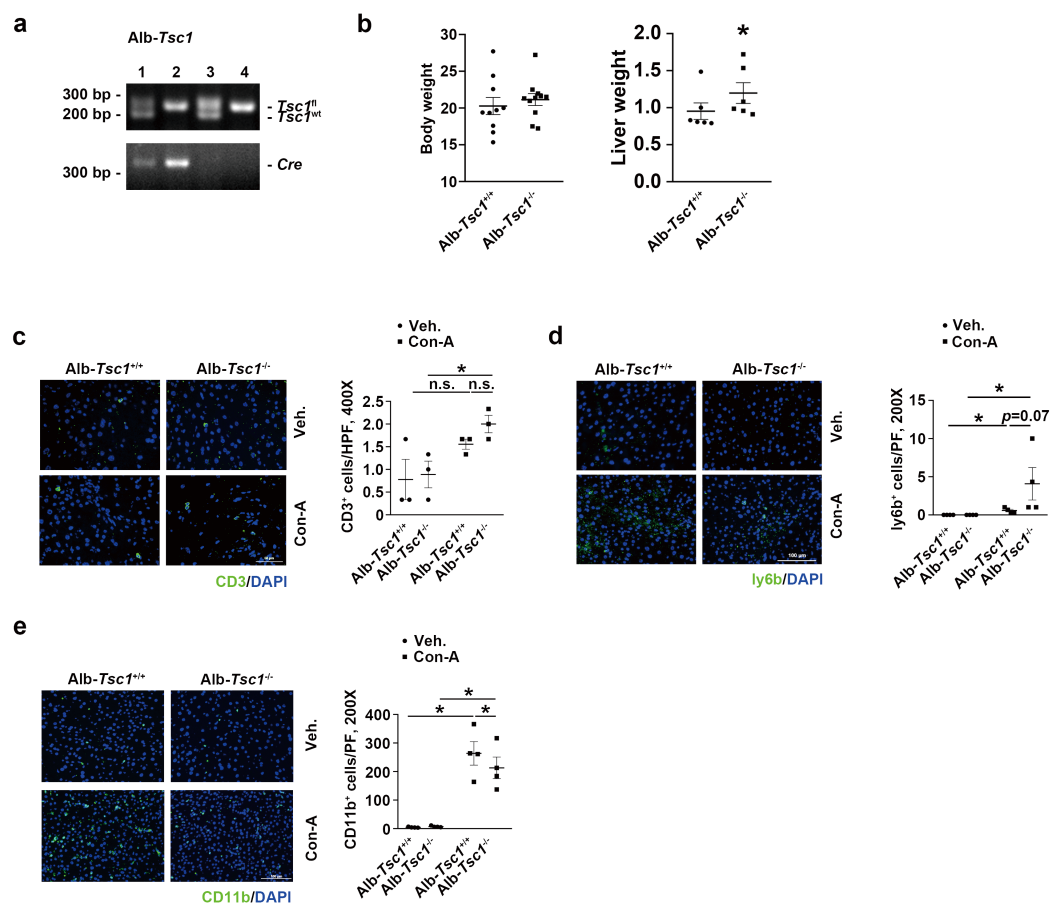


Supplementary Materials and Methods



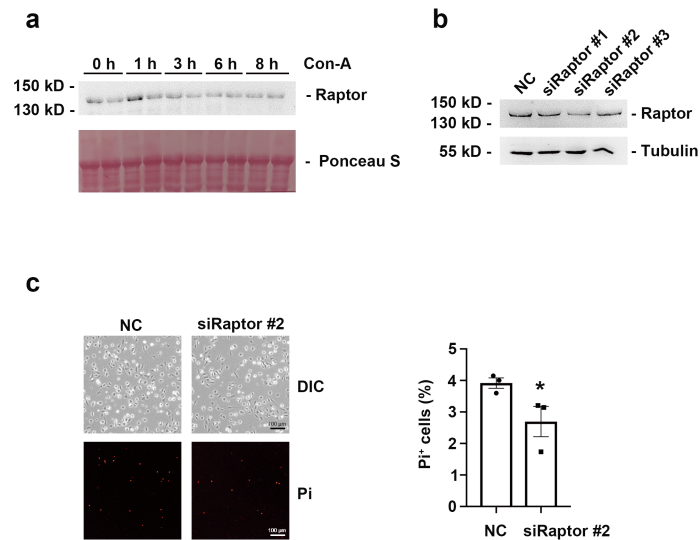
Supplementary Fig. 1 Time course analysis of Con-A-induced liver injury.

WT mice were treated with Con-A (15 mg/kg) for 1 h, 3 h, 6 h and 8 h. **a** The ALT levels in serum of mice, $n = 4$. **b** Representative HE-stained mouse livers. Scale bar = 200 μm . **c** Representative western blotting result of mTORC1 signaling in hepatic tissues. * $p < 0.05$. Data are expressed as the mean $\pm$ SEM, significance was determined using the 1-way ANOVA.

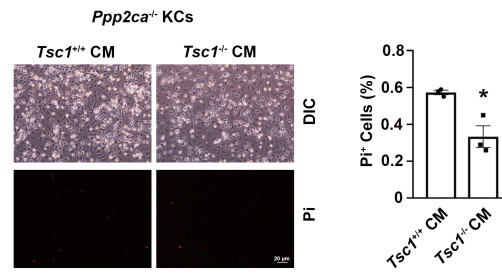


Supplementary Fig. 2 Hepatocyte specific *Tsc1* ablation leads to a diminished inflammatory cells infiltration. **a** Genotyping the mice by PCR analysis of genomic DNA; numbers (1-4) denote mice with different genotype: 1, Alb-*Tsc1*^{wt/-}; 2, Alb-*Tsc1*^{-/-}; 3, *Tsc1*^{fl/wt}; 4, *Tsc1*^{fl/fl}. **b** The liver weight and body weight of Alb-*Tsc1*^{+/+} and Alb-*Tsc1*^{-/-} mice. **c** Left, representative immunofluorescent staining images for CD3. Scale bar = 50 μm. Right, quantitative determination of CD3⁺ cells among groups as indicated, n = 3. **d** Left, representative immunofluorescent staining images for Ly6b⁺ cells. Scale bar = 100 μm. Right, quantitative determination of Ly6b⁺ cells among groups as

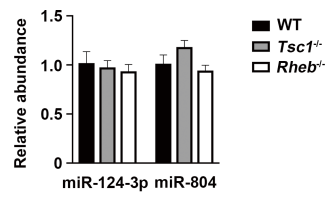
indicated, $n = 4$. **e** Left, representative immunofluorescent staining images for CD11b⁺ cells. Scale bar = 100 μ m. Right, quantitative determination of CD11b⁺ cells among groups as indicated, $n = 4$. * $p < 0.05$. Data are expressed as the mean $\pm$ SEM. For C-E, significance was determined using the 1-way ANOVA. For B and C, significance was determined using Student 1-tailed t test.



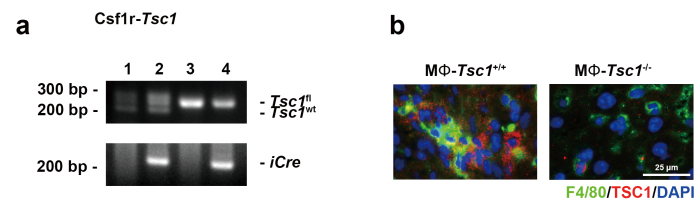
Supplementary Fig. 3 Hepatocyte mTORC1 suppression attenuates KC death. **a** The expression of Raptor in hepatic tissues. **b**, Primary hepatocytes transfected with siRNAs for Raptor. **c**, Left, representative Pi-staining images for primary KCs with CM from siRaptor #2 transfected hepatocytes for 24 h. Scale bar = 100 μm . Right, quantitative determination of Pi^+ KCs among groups as indicated. * $p < 0.05$, $n = 3$. Data are expressed as the mean $\pm$ SEM, significance was determined using Student 1-tailed t test.



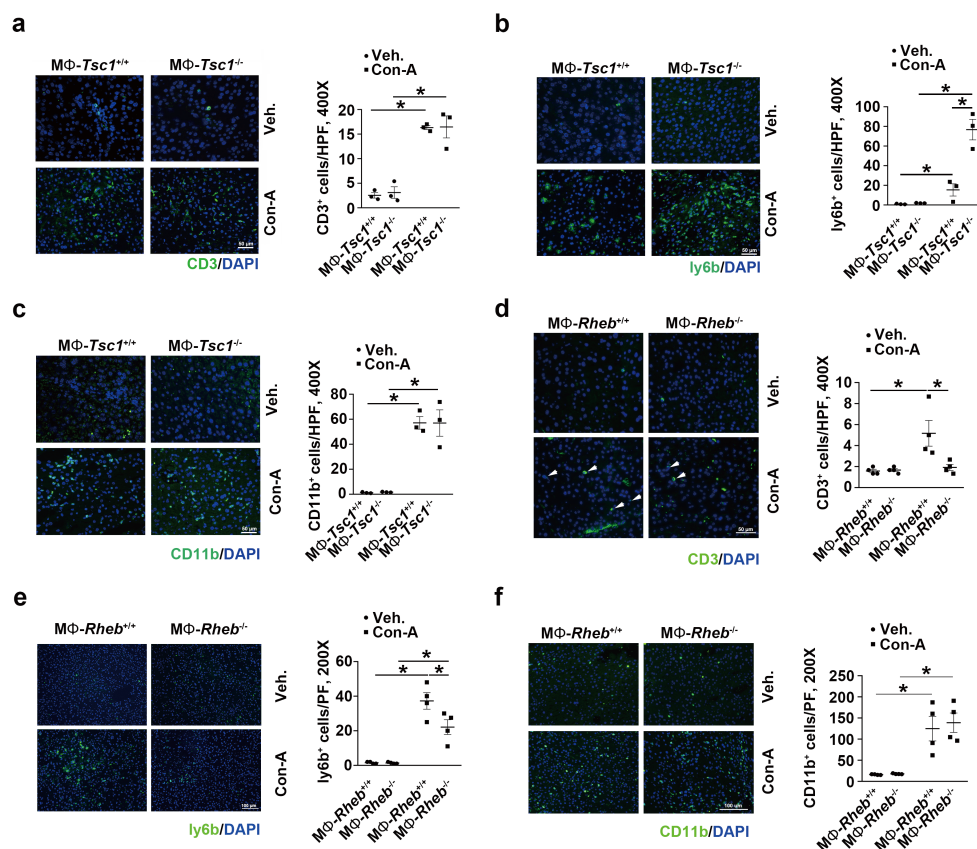
Supplementary Fig. 4 PP2A C α ablation in KCs represses the *Tsc1*^{-/-} CM-induced KCs death. Left, representative Pi-staining images for *Ppp2Ca*^{-/-} KCs cultured with *Tsc1*^{+/+} or *Tsc1*^{-/-} hepatocytes CM. Scale bar = 20 μ m. Right, quantitative determination of Pi⁺ KCs among groups as indicated. * $p < 0.05$, $n = 3$. Data are expressed as the mean $\pm$ SEM, significance was determined using Student 1-tailed t test.



Supplementary Fig. 5 miR-124-3p and miR-804 levels in primary hepatocytes. QRT-PCR assays for miR-124-3p and miR-804 in WT and *Tsc1*^{-/-} primary hepatocytes. Data are expressed as the mean $\pm$ SEM, significance was determined using the 1-way ANOVA.

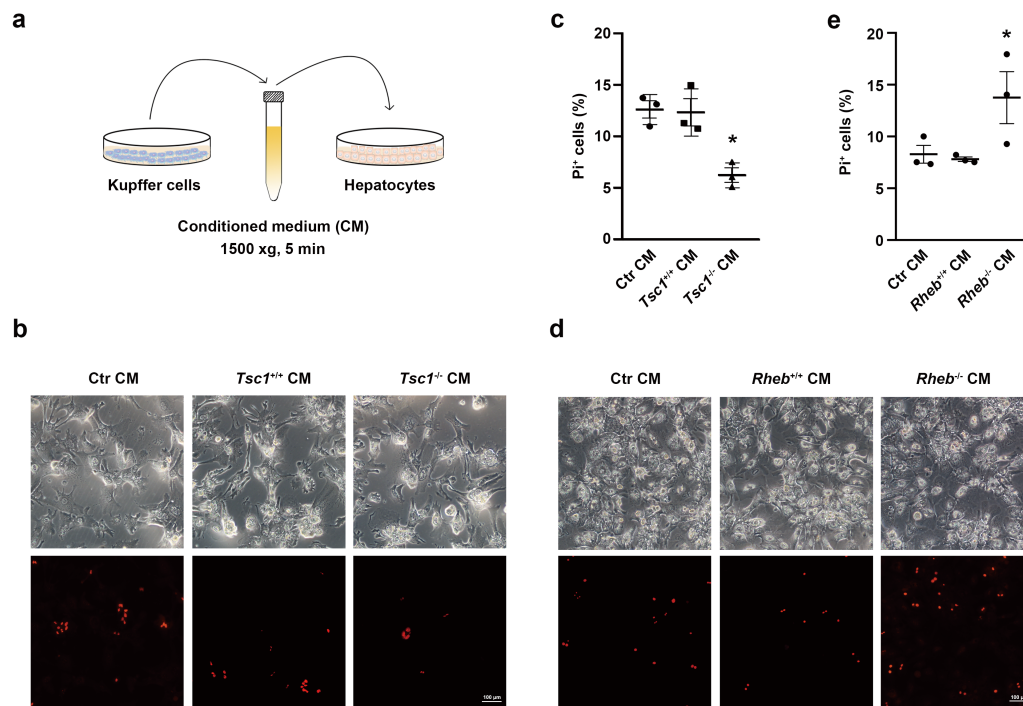


Supplementary Fig. 7 *Tsc1* gene is ablated in KCs. **a** Genotyping the mice by PCR analysis of genomic DNA; numbers (1-4) denote mice with different genotype: 1, *Csf1r-Tsc1^{fl/wt}*; 2, *Csf1r-Tsc1^{wt/-}*; 3, *Csf1r-Tsc1^{fl/fl}*; 4, *Csf1r-Tsc1^{-/-}*. **b** Representative co-immunofluorescent staining images for F4/80 with TSC1. Scale bar = 25 μm.



Supplementary Fig. 8 mTORC1 activation in macrophages promotes inflammatory cells infiltration. **a** Left, representative immunofluorescent staining images for CD3⁺ cells among groups as indicated. Scale bar = 50 μm. Right, quantitative determination of CD3⁺ cells among groups as indicated. n = 3. **b** Left, representative immunofluorescent staining images for ly6b⁺ cells among groups as indicated. Scale bar = 50 μm. Right, quantitative determination of ly6b⁺ cells among groups as indicated. n = 3. **c** Left, representative immunofluorescent staining images for CD11b⁺ cells among groups as indicated. Scale bar = 50 μm. Right, quantitative determination of CD11b⁺ cells among groups as indicated. n = 3. **d** Left, representative

immunofluorescent staining images for CD3⁺ cells among groups as indicated. CD3⁺ cells are indicated by white arrows; Scale bar = 50 μ m. Right, quantitative determination of CD3⁺ cells among groups as indicated. n = 4. **e** Left, representative immunofluorescent staining images for ly6b⁺ cells among groups as indicated. Scale bar = 100 μ m. Right, quantitative determination of ly6b⁺ cells among groups as indicated. n = 4. **f** Left, representative immunofluorescent staining images for CD11b⁺ cells among groups as indicated. Scale bar = 100 μ m. Right, quantitative determination of CD11b⁺ cells among groups as indicated. n = 4. * $p < 0.05$. Data are expressed as the mean $\pm$ SEM. For A-F, significance was determined using the 1-way ANOVA.



Supplementary Fig. 9 The activation of mTORC1 in KCs protects hepatocytes against to death. **a** The co-culture system of KCs and hepatocytes. **b** Representative pi-staining images for WT primary hepatocytes cultured with CM for 48 h, which was from WT, *Tsc1*^{+/-} and *Tsc1*^{-/-} primary KCs, respectively. **c** Quantitative determination of Pi⁺ KCs among groups as indicated. n=3. **d** Representative pi-staining images for WT primary hepatocytes cultured with CM for 24 h, which was from WT, *Rheb*^{+/-} and *Rheb*^{-/-} primary KCs, respectively. **e** Quantitative determination of Pi⁺ KCs among groups as indicated. n=3. * *p*<0.05 versus *Tsc1*^{+/-} CM. Data are expressed as the mean ± SEM. For C and E, significance was determined using the 1-way ANOVA.