| | Control (n = 8) | CCl₄-corn oil (n = 8) | CCl ₄ -COS (n = 8) |
|---------------------|--------------------|----------------------------|----------------------------------|
| ALT (U/L) | 24.13 ± 3.23 | 63.13 ± 14.67 [#] | 55.13 ± 19.61 |
| AST (U/L) | 111.00 ± 18.64 | 118.13 ± 27.77 | 101.25 ± 14.83 |
| ALP (U/L) | 87.63 ± 18.74 | 72.50 ± 16.22 | 72.25 ± 17.15 |
| CHO (mmol/L) | 3.04 ± 0.24 | 2.80 ± 0.36 | 2.99 ± 0.48 |
| HDL-C (mmol/L) | 2.14 ± 0.19 | $1.71 \pm 0.28^{\#}$ | 1.93 ± 0.34 |
| LDL-C (mmol/L) | 0.18 ± 0.03 | $0.27 \pm 0.02^{\#}$ | 0.22 ± 0.06* |
| TG (mmol/L) | 1.42 ± 0.40 | 1.9 6± 0.41 [#] | 1.78 ± 0.25 |
| serum TBA (µmol/L) | 0.40 ± 0.61 | 4.24 ± 3.14 [#] | 3.44 ± 2.71 |
| serum TBiL (µmol/L) | 0.84 ± 0.32 | 1.13 ± 0.58 | 1.29 ± 0.75 |

Supplemental Table 1. Serum biochemical parameters of CCI4-treated mice

Values are presented as the mean \pm SD (n = 8 animals per group).

^{*}P < 0.05, significantly different from the Control group

*P < 0.05, significantly different from the CCl₄-corn oil group; ANOVA followed by Tukey's test.



Supplemental Figure 1

Blinded quantitative assessment of hepatic inflammation in BDL-challenged rats and CCl₄-challenged mice. The values are expressed as the mean \pm SD (n = 8 of each group), [#]P < 0.05; significantly different from sham/control group, *P < 0.05; significantly different from BDL-NS/CCl₄-corn oil group; ANOVA followed by Tukey's test.

Α.





(A) Western blot analysis of Notch1 and Notch2 expressions in LX-2 cells. (B) COS intervention inhibited the protein expressions of Notch3 and HES1 in CCl₄ mice livers. (C) COS time-dependently repressed Notch3 and HES1 protein

expressions in LX-2 cells. (D) and (E) The protein expressions of Notch3 and HES1 were significantly down-regulated in a dose- and time- dependent manner in mouse pHSCs. GAPDH served as a loading control. The values are expressed as the mean \pm SD of five independent assays, [#]P < 0.05; significantly different from the control group (B and C), *P < 0.05; significantly different from the CCl₄-corn oil group (B) and TGF β 1 treatment group in LX-2 cells (C) and the control group in mouse pHSCs (D and E); ANOVA followed by Tukey's test.



Supplemental Figure 3

(A) Western blot analysis of PPM1G and WWP2 expressions in LX-2 cells. (B) LX-2 cells were treated with 2 ng·mL⁻¹TGF- β 1 with or without 10µM COS and/or CdCl₂ (0.75 or 1.5 µM) for 24 h after no FBS starvation. The protein expressions of WWP2, PPM1G, NICD3, HES1, and liver fibrosis markers were determined by immunoblotting with the indicated antibodies.

(C) mouse pHSCs were treated with 10 μ M COS and/or CdCl₂ (0.75 or 1.5 μ M). The same protein expressions were detected by western blot with the indicated antibodies. GAPDH was used as a loading control for all western blot assays. The data are expressed as the mean ± SD of five independent assays. [#]P < 0.05; significantly different from the 2T + COS 10 μ M group; *P < 0.05; significantly different from the 2T + CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the 2T + COS 10 μ M + CdCl₂ 1.5 μ M group in LX-2 cells. [#]P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M group; *P < 0.05; significantly different from the CdCl₂ 1.5 μ M

Supplemental Figure 4

(A) LX-2 cells were transfected with 2.5 μ g pCAGGS-WWP2 or vector and subsequently treated with 2 ng·mL⁻¹ TGF- β 1 with or without COS (5 or 10 μ M) for 24 h after no FBS starvation. The protein expressions of WWP2, PPM1G, NICD3, HES1, and liver fibrosis markers were determined by immunoblotting with the indicated antibodies. (B) LX-2 cells were transfected with 50 nM si-WWP2-1/2 or si-Control and subsequently treated with 2 ng·mL⁻¹ TGF- β 1 with or without COS (5 or 10 μ M) for 24 h after no FBS starvation. The same protein expressions were detected by western blot with the indicated antibodies. GAPDH was used as a loading control for all western blot assays. The data are expressed as the mean ± SD of five independent assays. [#]P < 0.05; significantly different from the pcDNA3.1/si-control + COS 10 μ M group; *P < 0.05; significantly different from the pCAGGS-WWP2/si-WWP2-1 + 2T group; [&]P < 0.05; significantly different from the si-WWP22 + 2T group; $^{\Delta}P$ < 0.05; significantly different from the pCAGGS-WWP2 + 2T + COS 10 μ M group. ANOVA followed by

Tukey's test.