OMTN, Volume 8

## **Supplemental Information**

## Anti-fibrotic Effects of Synthetic

## Oligodeoxynucleotide for TGF- $\beta$ 1 and Smad

## in an Animal Model of Liver Cirrhosis

Jung-Yeon Kim, Hyun-Jin An, Woon-Hae Kim, Mi-Gyeong Gwon, Hyemin Gu, Yoon-Yub Park, and Kwan-Kyu Park



Supplementary fig. 1. Confirmation of FITC-labeled TGF- $\beta$ 1/Smad ODN in AML12 cells. (A) Fluorescence activity was detected in both cytoplasm and nucleus with FITC-labeled ODN deposition. Scale bar; 50 µm. (B) Transfection efficiency of FITC-labeled TGF- $\beta$ 1/Smad ODN through flow cytometry. Effect of Smad decoy, TGF- $\beta$ 1 antisense ODN and TGF- $\beta$ 1/Smad ODN on Smad transcription activity and expression levels of TGF- $\beta$ 1 in AML12 cells. (C) Luciferases activity in TGF- $\beta$ 1-treated AML12 cells, (D) electrophoretic mobility shift assay (EMSA), (E) Real-time PCR and (F) Western blot assay. \* p < 0.05 versus Normal control. \*p < 0.05 versus TGF- $\beta$ 1-treated group.



Supplementary fig. 2. TGF- $\beta$ 1 was capable on inducing EMT in AML12 cells. (A) Time effects of TGF- $\beta$ 1 on EMT were examined by morphologic changes in AML12 cells treated with 2 ng/ml of TGF- $\beta$ 1. (B) Time effects of TGF- $\beta$ 1 on the expression of EMT marker (E-cadherin and vimentin) by Western blotting.



Supplementary fig. 3. Confirmation of TGF- $\beta$ 1/Smad ODN on CCl<sub>4</sub>-induced mouse model. (A) Green fluorescence in liver of mice transfected with FITC-labeled TGF- $\beta$ 1/Smad ODN. Original magnification, ×200. (B) TGF- $\beta$ 1/Smad ODN decrease Smad binding activity. Representative results of electrophoretic mobility shift assay for Smad binding sites after 8 weeks of CCl<sub>4</sub> administration. TGF- $\beta$ 1/Smad ODN diminish expression of TGF- $\beta$ 1 in CCl<sub>4</sub>induced mouse liver tissue. (C) Real-time PCR and (D) Western blotting. \*p < 0.05 versus Normal control. \*p < 0.05 versus CCl<sub>4</sub>+Scr ODN treated group.