



Supplementary information, Figure S1. Transgene constructs of C/O^{Tg} mice. (A) Human CD81 and OCLN genes were cloned in between two introns and their liver-specific expression was driven by mouse Alb promoter and AFP enhancer, respectively. Single transgenic ICR mice were generated as $CD81^{Tg}$ (C^{Tg}) and $OCLN^{Tg}$ (O^{Tg}). The heterozygous C^{Tg} and O^{Tg} littermates were crossed to yield double transgenic mice ($CD81^{Tg}/OCLN^{Tg}$, C/O^{Tg}). (B) Expression of hCD81 and hOCLN in C/O^{Tg} and C^{Tg} mice was validated by PCR (see Supplementary information, Table S6 for primers), wt ICR as control. (C) The expression of transgenes in liver of C/O^{Tg} , C^{Tg} mice was verified by immunoblotting with human specific antibodies. Huh7.5.1 cell lysate as positive control. (D) Tissue-specific expression of the transgenes (hCD81 and hOCLN) was detected by quantitative RT-PCR on total RNA extracted from different tissues of ICR- C/O^{Tg} mice (see Supplementary information, Table 6 for primers). (E) hCD81 and hOCLN expressed in tight junctions of parenchymal liver cells were detected by immunofluorescence microscopy of paraffin-embedded C/O^{Tg} liver sections ($n = 3$). Wt ICR ($n = 3$) liver sections were used as negative control. Green channel, hCD81 and hOCLN; blue channel, DAPI; Bars = $10\mu m$.