

**Table S1 (related to Figures 1D and 3F). Pathology of human NASH liver samples.**

<b>ID</b>	<b>Age</b>	<b>Gender</b>	<b>Pathological diagnoses</b>
1	68	Male	Non-alcoholic steatohepatitis; cirrhosis, mixed macronodular and micronodular type. Minimal inflammatory activity, with minimal or no ongoing steatosis. No evidence of hepatocyte dysplasia or malignancy.
2	56	Female	Type 2 Diabetes. Obesity. Advanced chronic liver disease (stage 4: "cirrhosis"). Marked fibrosis throughout the entire liver. The residual hepatocellular parenchyma shows abundant well-formed Mallory hyaline, consistent with advanced chronic liver disease from steatohepatitis.
3	53	Male	NASH. Cirrhosis. Mild steatosis and focal active steatohepatitis. Focal Mallory hyaline is identified.
4	67	Female	Cirrhosis, NASH. Active steatohepatitis, grade 2 of 3.
5	64	Female	NASH. Cirrhosis with steatohepatitis and moderate macrovesicular steatosis.
6	62	Female	Fatty liver. Cirrhosis. Cirrhosis with moderate macrovesicular steatosis (35%) and focal steatohepatitis, consistent with fatty liver disease.
7	43	Female	Fatty liver. Cirrhosis with focal steatosis and mild activity.
8	57	Female	NASH cirrhosis

**Table S2 (related to Figure 2 and Figure S2). Primers used for *WWTR1* mutagenesis.**

Primers	5'- Sequence -3'
S58A F	CCTGATgcgGGCTCGCACTCGC
S58A R	CTCCTTAAAG AAAGACTCCG GCAGGATCTT CT
S62A F	TCGCACgcgCGCCAGTCCAG
S62A R	GCCCGAATCA GGCTCCTTAA AGAAAGACTC C
S89A F	TCGCACgcgTCGCCCGCGTCC
S89A R	GCGGACATGC TGGGCACCC
S117A F	CAGCAGgccTACGACGTGACCGACG
S117A R	GCGGAGGTGC GCGTGCTGC
S311A F	GAGCAGgccACTGACAGTGGCCTG
S311A R	CCTCGAATGA TATGGCCCTC CATTGAGGAA AG

Note: lower case letters indicate the mutated nucleotide based on the sequence of WT human *WWTR1* mRNA.

**Table S3 (related to all figures). siRNA and shRNA sequences used in this study.**

<b>Target Gene</b>	<b>siRNA or shRNA</b>	<b>siRNA Sense Sequences (5' to 3')</b>
<i>Btrc</i> ( $\beta$ -TrCP)	siRNA	rGrArGrCrUrArArArUrUrGrUrGrArUrArCrCrUrUrCrCrUGT
<i>Btrc</i> ( $\beta$ -TrCP)	shRNA	GCGACATAGTTTACAGAGAAT
<i>Lats2</i>	siRNA	rArArGrArUrUrGrUrArUrUrUrArUrGrGrUrArArArGrGAA
<i>Rhoa</i>	siRNA	rCrUrArCrCrArGrUrArUrUrUrArGrArArGrCrCrArArCrCAC
<i>Rhoa</i>	shRNA	GTCAAGCATTCTGTCCAAAT
<i>Itpr1</i> (IP3R1)	siRNA	rGrUrUrUrCrArUrCrUrGrCrArArGrCrUrArArUrArArACA
<i>Itpr2</i> (IP3R2)	siRNA	rGrCrUrUrUrGrArArGrUrArUrUrArCrGrCrCrArArCrCrACA
<i>Itpr3</i> (IP3R3)	siRNA	rGrUrCrCrUrGrCrUrUrArGrUrArCrCrGrUrUrGrArArGrAGA
<i>Prkaca</i> (PKA)	siRNA	rGrGrArUrCrArGrUrUrUrGrArUrArGrArArUrCrArArGrACC
<i>Gramd1b</i> (ASTER-B)	siRNA	rGrGrCrGrUrUrUrCrUrCrUrGrArUrArUrCrArUrCrUrUrCCA
<i>Gramd1b</i> (ASTER-B)	shRNA	GATGAAGGACTCGCTTATCAA
<i>Gramd1c</i> (ASTER-C)	siRNA	rCrArArGrUrCrArCrUrGrGrArCrUrUrGrArArUrArArGrAAT
<i>Gramd1c</i> (ASTER-C)	shRNA	GGGAAAGAGATGAGAAGTTCT
<i>Adcy10</i> (sAC)	siRNA	rGrArArArUrCrUrCrUrGrArCrGrArArUrGrArArGrArUrUCT
<i>ADCY10</i> (human sAC)	siRNA	rCrArArUrCrArUrUrUrCrUrArArCrArUrGrUrCrArArArGAA
<i>Cyp27a1</i>	siRNA	rGrUrUrCrCrArGrArArCrUrCrArGrUrCrUrArUrArUrCrACT
<i>Ch25h</i>	siRNA	rArCrCrUrGrArUrUrUrCrUrGrArCrUrCrUrUrUrArArArUAA
<i>Gnas</i>	siRNA	rCrUrUrCrCrCrArCrCrUrGrArArUrUrCrUrArUrGrArGrCAT
<i>Srebp2</i> ( <i>Srebf2</i> )	siRNA	rArGrGrCrArArGrArCrUrGrArUrUrGrUrUrCrUrGrArGrCTG

**Table S4 (Related to all figures). Primers used for qPCR.**

<b>Primers</b>	<b>Organism</b>	<b>5'- Sequence -3'</b>
<i>Hprt</i> F	mouse	TCAGTCAACGGGGGACATAAA
<i>Hprt</i> R	mouse	GGGGCTGTACTGCTTAACCAG
<i>HPRT</i> F	human	CCTGGCGTCGTGATTAGTGAT
<i>HPRT</i> R	human	AGACGTTTCAGTCCTGTCCATAA
<i>Taz (Wwtr1)</i> F	mouse	CATGGCGGAAAAAGATCCTCC
<i>Taz (Wwtr1)</i> R	mouse	GTCGGTCACGTCATAGGACTG
<i>WWTR1</i> F	human	TCCCAGCCAAATCTCGTGATG
<i>WWTR1</i> R	human	AGCGCATTGGGCATACTCAT
<i>Tgfb1</i> F	mouse	CTCCCGTGGCTTCTAGTGC
<i>Tgfb1</i> R	mouse	GCCTTAGTTTGGACAGGATCTG
<i>Acta2</i> F	mouse	ATGCTCCCAGGGCTGTTTTCCCAT
<i>Acta2</i> R	mouse	GTGGTGCCAGATCTTTTCCATGTCC
<i>Btrc</i> F	mouse	AAGACTGTAATAATGGCGAACCC
<i>Btrc</i> R	mouse	TCTCTTGGTTTATGCAAAGCCTG
<i>Rhoa</i> F	mouse	AGCTTGTGGTAAGACATGCTTG
<i>Rhoa</i> R	mouse	GTGTCCCATAAAGCCAACCTCTAC
<i>Col1a1</i> F	mouse	GCTCCTCTTAGGGGCCACT
<i>Col1a1</i> R	mouse	CCACGTCTCACCATTGGGG
<i>Col1a2</i> F	mouse	GTAACCTCGTGCCTAGCAACA
<i>Col1a2</i> R	mouse	CCTTTGTCAGAATACTGAGCAGC
<i>Col3a1</i> F	mouse	CTGTAACATGGAACTGGGGAAA
<i>Col3a1</i> R	mouse	CCATAGCTGAACTGAAAACCACC
<i>Dpt</i> F	mouse	TGGATGGGTGAATCTTAACCGC
<i>Dpt</i> R	mouse	TCAGAGCCTTCCTTCTTGCTA
<i>Adgre1 (F4/80,Emr1)</i> F	mouse	ACCACAATACCTACATGCACC
<i>Adgre1 (F4/80,Emr1)</i> R	mouse	AAGCAGGCGAGGAAAAGATAG
<i>Tnfa</i> F	mouse	CTTCTGTCTACTGAACTTCGGG
<i>Tnfa</i> R	mouse	CAGGCTTGTCACTCGAATTTTG
<i>Mcp1</i> F	mouse	TAAAAACCTGGATCGGAACCAA
<i>Mcp1</i> R	mouse	GCATTAGCTTCAGATTTACGGGT
<i>Ihh</i> F	mouse	CTCTTGCTACAAGCAGTTCA
<i>Ihh</i> R	mouse	CCGTGTTCTCCTCGTCCTT
<i>Spp1 (Opn)</i> F	mouse	CTGACCCATCTCAGAAGCAGAATCT
<i>Spp1 (Opn)</i> R	mouse	TCCATGTGGTCATGGCTTTTCATTGG
<i>Timp1</i> F	mouse	CTCAAAGACCTATAGTGCTGGC
<i>Timp1</i> R	mouse	CAAAGTGACGGCTCTGGTAG
<i>Last1</i> F	mouse	TGGTGA CTCTGGGATAAAGAA
<i>Lats1</i> R	mouse	GGGAGTAACTCTGAATCCGAGAC
<i>Lats2</i> F	mouse	GGACCCAGGAATGAGCAG

<i>Lats2 R</i>	mouse	CCCTCGTAGTTTGCACCACC
<i>Itpr1 F</i>	mouse	CGTTTTGAGTTTGAAGGCGTTT
<i>Itpr1 R</i>	mouse	CATCTTGCGCCAATTCCCG
<i>Itpr2 F</i>	mouse	CCTCGCCTACCACATCACC
<i>Itpr2 R</i>	mouse	TCACCACTCTCACTATGTCTG
<i>Itpr3 F</i>	mouse	GGGCGCAGAACAACGAGAT
<i>Itpr3 R</i>	mouse	GAAGTTTTGCAGGTCACGGTT
<i>Gnas F</i>	mouse	CAGAGCCTCCATTGGGGTC
<i>Gnas R</i>	mouse	GCTTCTCGCTCAACTGGGG
<i>Cyp27a1 F</i>	mouse	CCAGGCACAGGAGAGTACG
<i>Cyp27a1 R</i>	mouse	GGGCAAGTGCAGCACATAG
<i>Ch25h F</i>	mouse	TGCTACAACGGTTCGGAGC
<i>Ch25h R</i>	mouse	AGAAGCCCACGTAAGTGATGAT
<i>Prkaca F</i>	mouse	AGATCGTCCTGACCTTTGAGT
<i>Prkaca R</i>	mouse	GGCAAACCGAAGTCTGTCC
<i>Gramd1b F</i>	mouse	ACACAATGGGCTACTGTGAGG
<i>Gramd1b R</i>	mouse	GGCTTGGTCTCGATGCTACT
<i>Gramd1c F</i>	mouse	AACAAAGATCAGGCCACCG
<i>Gramd1c R</i>	mouse	AGTGAGCTCTTCAGCTGTTCC
<i>Adcy10 F</i>	mouse	TGCCAGTGGGATTGTCTTC
<i>Adcy10 R</i>	mouse	TGAGGCCCAAACACTGATAC
<i>ADCY10 F</i>	human	ACAAAGTGTACGACCTTCATGC
<i>ADCY10 R</i>	human	CGAAGCTCAGATAAATAGCCCTG

*Hprt*, hypoxanthine guanine phosphoribosyl transferase; *Taz (Wwtr1)*, WW domain containing transcription regulator 1; *Tgfb1*, transforming growth factor, beta 1; *Acta2*,  $\alpha$ -smooth muscle actin; *Btrc*, beta-transducin repeat containing protein; *Rhoa*, ras homolog family member A; *Col1a1*, collagen type I alpha 1; *Col1a2*, collagen type I alpha 2; *Col3a1*, collagen, type III, alpha 1; *Dpt*, dermatopontin; *Adgre1 (F4/80)*, adhesion G protein-coupled receptor E1; *Tnfa*, tumor necrosis factor- $\alpha$ ; *Mcp1*, monocyte chemoattractant protein-1; *lhh*, Indian hedgehog; *Spp1*, secreted phosphoprotein 1; *Timp1*, tissue inhibitor of metalloproteinase 1; *Lats1*, large tumor suppressor; *Lats2*, large tumor suppressor 2; *Itpr1*, inositol 1,4,5-trisphosphate receptor 1; *Itpr2*, inositol 1,4,5-trisphosphate receptor 2; *Itpr3*, inositol 1,4,5-trisphosphate receptor 3; *Gnas*, GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus; *Cyp27a1*, cytochrome P450 family 27 subfamily a polypeptide 1; *Ch25h*, cholesterol 25-hydroxylase; *Prkaca*, protein kinase, cAMP dependent, catalytic, alpha; *Gramd1b*, GRAM domain containing 1B; *Gramd1c*, GRAM domain containing 1C; *Adcy10/ADCY10*, adenylate cyclase 10.