Glucose_homeostasis	Fatty_acid_homeostasis	Acute_phase_and_iron_metabolis
Agl	Acaa1a	Ahsg
Amy1	Acaa1b	Ccl5
Amy2a5	Acaa2	Ccr5
Acss1	Acaca	Cd163
Acss2	Acacb	Crp
Adh1	Acadl	Ednrb
Adh4	Acadm	F2
Adh5	Acads	F8
Adh7	Acadsb	Fn1
Adpgk	Acadvl	Hp
Akr1a1	Acat1	Il1a
Aldh1a3	Acox1	Il1b
Aldh1b1	Acox3	Il1b
Aldh2	Acsl1	Il1rn
Aldh3a1	Acsl3	Il1rn
Aldh3a2	Acsl4	Itih4
Aldh3b1	Acsl5	Lbp
Aldh3b2	Adh1	Orm1
Aldh3b3	Adh4	Orm2
Aldh7a1	Adh5	Saa1
Aldh9a1	Adh7	Saa2
Aldoa	Aldh1b1	Saa3
Aldob	Aldh2	Saa4
Aldoc	Aldh3a2	Serpina1b
Bpgm	Aldh7a1	Serpina3n
Dlat	Aldh9a1	Serpinf2
Dld	Cpt1a	Sigirr
Eno1	Cpt1b	Stat3
Eno1b	Cpt1c	Stat5b
Eno2	Cpt2	Tnf
Eno3	Cyp4a10	Tnfrsf11a
Enpp1	Cyp4a12a	Hamp
Enpp3	Cyp4a12b	Hamp2
Fbp1	Cyp4a14	
G6pc	Cyp4a31	
G6pc3	Echs1	
Galm	Eci1	
Gapdh	Eci2	
Gapdhs	Eci3	
Gck	Ehhadh	
Gpi1	Elovl1	
Hk1	Elovl2	
Hk2	Elovl3	
Hk3	Elovl5	
Hkdc1	Elovl6	
Ldha	Elovl7	
Ldhal6b	Fads1	
Ldhb	Fads2	
Minpp1	Fasn	
Pck1	Gcdh	
Pck2	Hacd1	

Pdha1
Pdhb
Pfkl
Pfkm
Pfkp
Pgam1
Pgam2
Pgk1
Pgm1
Pgm2
Pklr
Pkm
Tpi1
Gaa
Ganc
Gbe1
Gyg
Gys1
Gys2
Mgam
Pgm1
Pgm2
Pgm2l1
Pygb
Pygl
Pygm
Treh
Ugp2

Hacd2
Hacd3
Hacd4
Hadh
Hadha
Hadhb
Hsd17b12
Hsd17b4
Mcat
Mecr
Oxsm
Ppt1
Ppt2
Scd1
Scd2
Scd3
Scd4
Scp2
Tecr

Biosynthesis_of_amino_acid	Steroid_hormone_biosynthesi	Retinol_metabolism
Psph	Cyp17a1	Bco1
Psat1	Sts	Adh1
Cth	Sult2b1	Adh7
Shmt2	Cyp21a1	Adh4
Mat2b	Hsd3b5	Adh5
Gpt2	Hsd3b2	Dhrs3
Acy1	Hsd3b1	Dhrs4
Asl	Hsd3b6	Dhrs9
Prps2	Srd5a1	Rdh10
Aco1	Srd5a2	Rdh11
Aco2	Srd5a3	Rdh12
Aldoa	Akr1d1	Rdh16
Aldoc	Hsd11b1	Rdh9
Mat1a	Akr1c18	Rdh1
Arg1	Cyp7b1	Rdh7
Arg2	Sult1e1	Hsd17b6
Ass1	Hsd17b1	Lrat
Bcat2	Hsd17b2	Dgat1
Cbs	Hsd17b6	Awat2
Cs	Hsd17b7	Rdh5
Eno1	H2-Ke6	Aox1
Eno2	Hsd17b12	Aox3
Eno3	Dhrs11	Aldh1a7
Gapdh	Cyp1a1	Aldh1a2
Glul	Cyp1a2	Aldh1a1
Got1	Cyp2b10	Cyp26a1
Got2	Cyp2b13	Cyp26b1
Idh1	Cyp2b9	Cyp1a1
Idh3g	Cyp2c38	Cyp1a2
Idh3b	Cyp2c39	Cyp2a4
Otc	Cyp2c40	Cyp2a5
Pah	Cyp2c29	Cyp2a12
Pcx	Cyp2c70	Cyp2b10
Pfkl	Cyp2c37	Cyp2b13
Pfkm	Cyp2c55	Cyp2b9
Pgam1	Cyp2c50	Cyp2c38
Pgk1	Cyp2c54	Cyp2c39
Pkm	Cyp2c68	Cyp2c40
Pklr	Cyp2d22	Cyp2c29
Prps1	Cyp2d9	Cyp2c70
Rpia	Cyp2d10	Cyp2c37
Shmt1	Cyp2d26	Cyp2c55
Pycr1	Cyp2d34	Cyp2c50
Taldo1	Cyp2d12	Cyp2c54
Nags	Cyp2d11	Cyp2c68
Tkt	Cyp2d40	Cyp2s1
Tpi1	Cyp3a11	Cyp3a11
Cps1	Cyp3a13	Cyp3a13
Aldob	Cyp3a16	Cyp3a16
Sds	Cyp3a25	Cyp3a25
Mat2a	Cyp3a41a	Cyp3a41a

Tat	Cyp3a44	Cyp3a44
Phgdh	Cyp2e1	Cyp4a12b
Mtr	Cyp1b1	Cyp4a10
Sdsl	Cyp7a1	Cyp4a14
Idh2	Ugt2b5	Cyp4a31
Asns	Ugt1a6a	Cyp4a12a
Prps1l3	Ugt2a1	Ugt2b5
Eno1b	Ugt1a10	Ugt1a6a
Pgam2	Ugt2a3	Ugt2a1
Pfkp	Ugt2b1	Ugt1a10
Aldh18a1	Ugt1a6b	Ugt2a3
Pycrl	Ugt2b34	Ugt2b1
Rpe	Ugt2b36	Ugt1a6b
Idh3a	Ugt2b38	Ugt2b34
Pycr2	Ugt2b37	Ugt2b36
Tha1	Ugt2b35	Ugt2b38
Csl	Comt	Ugt2b37
Prps1l1	Tomt	Ugt2b35
Gpt		Retsat

Complement_and_coagulatic	Bile_secretion	Cholesterol_metabolism	Metabolism_of_xenobiotics
F3	Ephx1	Abca1	Adh1
F7	Slco1a4	Apoa1	Adh4
F10	Slco1a1	Lpl	Adh5
F5	Slco1a6	Lcat	Adh7
F2	Slco1b2	Lipg	Aldh1a3
F12	Slc10a1	Pltp	Aldh3a1
F11	Slc22a7	Lipc	Aldh3b1
F9	Slc22a8	Cd36	Aldh3b2
Vwf	Slc22a1	Ldlr	Aldh3b3
F8	Hmgcr	Nceh1	Aox1
Thbd	Scarb1	Soat1	Aox3
Procr	Ldlr	Soat2	Cyp1a2
Proc	Nceh1	Apoc1	Cyp2e1
F2r	Cyp7a1	Apoc2	Fmo1
F2rl2	Nr1h4	Apoh	Fmo2
F13a1	Rxra	Angptl3	Fmo3
F13b	Nr0b2	Angptl4	Fmo4
Cpb2	Sult2a1	Scarb1	Fmo5
Fga	Sult2a3	Sort1	Gsta2
Fgb	Slc27a5	Apob	Gsta3
Fgg	Baat	Pcsk9	Gsta4
Klkb1	Aqp9	Ldlrap1	Gstk1
Kng1	Aqp8	Mylip	Gstm1
Kng2	Abcg5	Apoe	Gstm2
Bdkrb1	Abcg8	Lrp1	Gstm3
Bdkrb2	Abcb11	Lrp2	Gstm4
Plg	Abcc2	Lrpap1	Gstm5
Tfpi	Abcg2	Lipa	Gstm6
Serpinc1	Car2	Stard3	Gstm7
Serpind1	Slc4a2	Vdac1	Gsto1
Serpina5	Abcb1a	Vdac2	Gsto2
Pros1	Abcb1b	Vdac3	Gstp1
Serpine1	Abcb4	Tspo	Gstp2
Plat	Slc9a1	Cyp27a1	Gstt1
Plau	Abcc3	Vapa	Gstt2
Plaur	Abcc4	Vapb	Gstt3
Serpina1a	Slc51b	Npc1	Hpgds
Serpina1b	Kcnn2	Osbpl5	Maoa
Serpina1c	Atp1a1	Npc2	Maob
Serpina1d	Atp1a2	Star	Mgst1
Serpina1e	Atp1a3	Cyp7a1	Mgst2
Serpinf2	Atp1a4	Abcb11	Mgst3
Cfb	Atp1b1	Abcg5	Ugt1a10
Cfd	Atp1b2	Abcg8	Ugt1a6a
C3	Atp1b3	Apoa2	Ugt1a6b
Hc	Fxyd2	Apoc3	Ugt2a1
C6	Sct	Apoa4	Ugt2a3
C7	Sctr		Ugt2b1
C8a	Gnas		Ugt2b34
C8b	Adcy1		Ugt2b35
C8g	Adcy4		Ugt2b36

C9
C1qa
C1qb
C1qc
C1ra
C1rb
C1s2
C1s1
Mbl1
Mbl2
Masp1
Masp2
C2
C4b
C3ar1
Vsig4
Cr2
Itgam
Itgb2
Itgax
C5ar1
Cfh
Cfi
Serping1
Cd55
Daf2
Cd46
C4bp
Cd59a
Cd59b
Clu
Vtn

Adcy5
Adcy6
Adcy7
Adcy9
Prkaca
Prkacb
Cftr
Slc4a4
Aqp4
Aqp1
Slc10a2
Slc5a1
Slc2a1

Ugt2b37
Ugt2b38
Ugt2b5
Akr7a5
Cbr1
Cbr2
Cbr3
Cyp1a1
Cyp1b1
Cyp2e1
Cyp2f2
Cyp2s1
Dhdh
Ephx1
Hsd11b1
Sult2a1
Sult2a3

NAFLD	Ppar signaling	Hepatokines	**FullList**	**FullList**	**FullList**
Il6	Cd36	Ahsg	Agl	Itih4	Dgat1
Il6ra	Slc27a1	Fgf21	Amy1	Lbp	Awat2
Socs3	Slc27a4	Sepp1	Amy2a5	Orm1	Rdh5
Tnf	Slc27a2	Angptl4	Acss1	Orm2	Aox1
Tnfrsf1a	Slc27a5	Fetub	Acss2	Saa1	Aox3
Nfkb1	Slc27a6	Lect2	Adh1	Saa2	Aldh1a7
Rela	Fabp1	Postn	Adh4	Saa3	Aldh1a2
Ins2	Fabp2	Angptl6	Adh5	Saa4	Aldh1a1
Ins1	Fabp3	Ctsd	Adh7	Serpina1b	Cyp26a1
Insr	Fabp4	Fgl1	Adpgk	Serpina3n	Cyp26b1
Irs1	Fabp5	Igf1	Akr1a1	Serpinf2	Cyp2a4
Irs2	Fabp6	Gdf15	Aldh1a3	Sigirr	Cyp2a5
Pik3ca	Fabp7	Gpnmb	Aldh1b1	Stat3	Cyp2a12
Pik3cd	Ppara	Igfbp1	Aldh2	Stat5b	Cyp2s1
Pik3cb	Rxra	Igfbp2	Aldh3a1	Tnf	Retsat
Pik3r2	Rxrb	Igfbp3	Aldh3a2	Tnfrsf11a	F3
Pik3r1	Rxrg	Enho	Aldh3b1	Hamp	F7
Pik3r3	Ppard	Rbp4	Aldh3b2	Hamp2	F10
Akt1	Pparg	Fst	Aldh3b3	Psph	F5
Akt2	Hmgcs1	Inhbe	Aldh7a1	Psat1	F12
Akt3	Hmgcs2	Serpinb1a	Aldh9a1	Cth	F11
Gsk3a	Apoa1	Tsku	Aldoa	Shmt2	F9
Gsk3b	Apoa2	Clu	Aldob	Mat2b	Vwf
Nr1h3	Apoc3	Smoc1	Aldoc	Gpt2	Thbd
Rxra	Apoa5		Bpgm	Acy1	Procr
Srebf1	Pltp		Dlat	Asl	Proc
Mlx	Me1		Dld	Prps2	F2r
Mlxip	Me3		Eno1	Aco1	F2rl2
Mlxipl	Fads2		Eno1b	Aco2	F13a1
Pklr	Scd1		Eno2	Mat1a	F13b
Lep	Scd2		Eno3	Arg1	Cpb2
Lepr	Scd3		Enpp1	Arg2	Fga
Adipoq	Scd4		Enpp3	Ass1	Fgb
Adipor1	Cyp7a1		Fbp1	Bcat2	Fgg
Adipor2	Cyp8b1		G6pc	Cbs	Klkb1
Prkaa1	Nr1h3		G6pc3	Cs	Kng1
Prkaa2	Cyp27a1		Galm	Glul	Kng2
Prkab1	Dbi		Gapdh	Got1	Bdkrb1
Prkab2	Dbil5		Gapdhs	Got2	Bdkrb2
Prkag1	Lpl		Gck	Idh1	Plg
Prkag3	Acsl1		Gpi1	Idh3g	Tfpi
Prkag2	Acsl4		Hk1	Idh3b	Serpinc1
Ppara	Acsl6		Hk2	Otc	Serpind1
Cdc42	Acsl3		Hk3	Pah	Serpina5
Rac1	Acsl5		Hkdc1	Pcx	Pros1
Map3k11	Acsbg2		Ldha	Prps1	Serpine1
Mapk8	Acsbg1		Ldhal6b	Rpia	Plat
Mapk9	Acsbg3		Ldhb	Shmt1	Plau
Mapk10	Olr1		Minpp1	Pycr1	Plaur
Itch	Ehhadh		Pck1	Taldo1	Serpina1a
Ern1	Cyp4a12b		Pck2	Nags	Serpina1c

Traf2
Map3k5
Fos
Jun
Il1a
Il1b
Ikbkb
Xbp1
Cebpa
Cyp2e1
Fasl
Tgfb1
Eif2ak3
Eif2s1
Atf4
Ddit3
Bcl2l11
Bax
Fas
Casp8
Bid
Cycs
Cyct
Casp3
Casp7
Ndufv1
Ndufv2
Ndufv3
Ndufa1
Ndufa2
Ndufa3
Ndufa4
Ndufa4l2
Ndufa5
Ndufa6
Ndufa7
Ndufa8
Ndufa9
Ndufa10
Ndufab1
Ndufa11
Ndufa12
Ndufa13
Ndufb2
Ndufb3
Ndufb4
Ndufb4b
Ndufb4c
Ndufb5
Ndufb6
Ndufb7
Ndufb8

Cyp4a10
Cyp4a14
Cyp4a30b
Cyp4a29
Cyp4a31
Cyp4a32
Cyp4a12a
Acaa1a
Acaa1b
Scp2
Acox3
Acox1
Acox2
Cpt1a
Cpt1b
Cpt1c
Cpt2
Acadl
Acadm
Angptl4
Sorbs1
Plin1
Plin2
Plin4
Plin5
Adipoq
Mmp1a
Mmp1b
Ucp1
Ilk
Pdpk1
Ubc
Pck1
Pck2
Gk
Gk2
Gykl1
Aqp7

Pdha1
Pdhb
Pfkl
Pfkm
Pfkp
Pgam1
Pgam2
Pgk1
Pgm1
Pgm2
Pklr
Pkm
Tpi1
Gaa
Ganc
Gbe1
Gyg
Gys1
Gys2
Mgam
Pgm2l1
Pygb
Pygl
Pygm
Treh
Ugp2
Acaa1a
Acaa1b
Acaa2
Acaca
Acacb
Acadl
Acadm
Acads
Acadsb
Acadvl
Acat1
Acox1
Acox3
Acsl1
Acsl3
Acsl4
Acsl5
Cpt1a
Cpt1b
Cpt1c
Cpt2
Cyp4a10
Cyp4a12a
Cyp4a12b
Cyp4a14
Cyp4a31

Tkt
Cps1
Sds
Mat2a
Tat
Phgdh
Mtr
Sdsl
Idh2
Asns
Prps1l3
Aldh18a1
Pycrl
Rpe
Idh3a
Pycr2
Tha1
Csl
Prps1l1
Gpt
Cyp17a1
Sts
Sult2b1
Cyp21a1
Hsd3b5
Hsd3b2
Hsd3b1
Hsd3b6
Srd5a1
Srd5a2
Srd5a3
Akr1d1
Hsd11b1
Akr1c18
Cyp7b1
Sult1e1
Hsd17b1
Hsd17b2
Hsd17b6
Hsd17b7
H2-Ke6
Dhrs11
Cyp1a1
Cyp1a2
Cyp2b10
Cyp2b13
Cyp2b9
Cyp2c38
Cyp2c39
Cyp2c40
Cyp2c29
Cyp2c70

Serpina1d
Serpina1e
Cfb
Cfd
C3
Hc
C6
C7
C8a
C8b
C8g
C9
C1qa
C1qb
C1qc
C1ra
C1rb
C1s2
C1s1
Mbl1
Mbl2
Masp1
Masp2
C2
C4b
C3ar1
Vsig4
Cr2
Itgam
Itgb2
Itgax
C5ar1
Cfh
Cfi
Serping1
Cd55
Daf2
Cd46
C4bp
Cd59a
Cd59b
Clu
Vtn
Ephx1
Slco1a4
Slco1a1
Slco1a6
Slco1b2
Slc10a1
Slc22a7
Slc22a8
Slc22a1

Ndufb9
Ndufb10
Ndufb11
Ndufs1
Ndufs2
Ndufs3
Ndufs4
Ndufs5
Ndufs6
Ndufs7
Ndufs8
Ndufc1
Ndufc2
Sdha
Sdhb
Sdhc
Sdhd
Uqcrfs1
CYTB
Cyc1
Uqcrc1
Uqcrc2
Uqcrh
Uqcrb
Uqcrq
Uqcr10
Uqcr11
COX3
COX1
COX2
Cox4i1
Cox4i2
Cox5a
Cox5b
Cox6a1
Cox6a2
Cox6b1
Cox6b2
Cox6c
Cox7a2
Cox7a1
Cox7a2l
Cox7b
Cox7b2
Cox7c
Cox8a
Cox8b
Cox8c

Echs1
Eci1
Eci2
Eci3
Ehhadh
Elovl1
Elovl2
Elovl3
Elovl5
Elovl6
Elovl7
Fads1
Fads2
Fasn
Gcdh
Hacd1
Hacd2
Hacd3
Hacd4
Hadh
Hadha
Hadhb
Hsd17b12
Hsd17b4
Mcat
Mecr
Oxsm
Ppt1
Ppt2
Scd1
Scd2
Scd3
Scd4
Scp2
Tecr
Ahsg
Ccl5
Ccr5
Cd163
Crp
Ednrb
F2
F8
Fn1
Hp
Il1a
Il1b
Il1rn

Cyp2c37
Cyp2c55
Cyp2c50
Cyp2c54
Cyp2c68
Cyp2d22
Cyp2d9
Cyp2d10
Cyp2d26
Cyp2d34
Cyp2d12
Cyp2d11
Cyp2d40
Cyp3a11
Cyp3a13
Cyp3a16
Cyp3a25
Cyp3a41a
Cyp3a44
Cyp2e1
Cyp1b1
Cyp7a1
Ugt2b5
Ugt1a6a
Ugt2a1
Ugt1a10
Ugt2a3
Ugt2b1
Ugt1a6b
Ugt2b34
Ugt2b36
Ugt2b38
Ugt2b37
Ugt2b35
Comt
Tomt
Bco1
Dhrs3
Dhrs4
Dhrs9
Rdh10
Rdh11
Rdh12
Rdh16
Rdh9
Rdh1
Rdh7
Lrat

Hmgcr
Scarb1
Ldlr
Nceh1
Nr1h4
Rxra
Nr0b2
Sult2a1
Sult2a3
Slc27a5
Baat
Aqp9
Aqp8
Abcg5
Abcg8
Abcb11
Abcc2
Abcg2
Car2
Slc4a2
Abcb1a
Abcb1b
Abcb4
Slc9a1
Abcc3
Abcc4
Slc51b
Kcnn2
Atp1a1
Atp1a2
Atp1a3
Atp1a4
Atp1b1
Atp1b2
Atp1b3
Fxyd2
Sct
Sctr
Gnas
Adcy1
Adcy4
Adcy5
Adcy6
Adcy7
Adcy9
Prkaca
Prkacb
Cftr

FullList	FullList	FullList	FullList	FullList	FullList	FullList
Slc4a4	Asah2	Dut	Ly96	Pex13	Slc6a16	Nrf1
Aqp4	Asap1	E2f2	Lyplal1	Pex16	Slc6a4	Nox4
Aqp1	Ascl3	E4f1	Map2k1	Pex19	Slc6a8	Cybb
Slc10a2	Atf3	Ebp	Map2k2	Pex3	Slc7a5	Pex7
Slc5a1	Atf4	Ece1	Map3k11	Pex5	Slco1c1	Sod3
Slc2a1	Atg10	Ech1	Map3k5	Pgp	Slco2a1	Gpx2
Abca1	Atg2b	Edem	Mapk1	Phlda3	Smad7	Txnrd1
Apoa1	Atg4a	Efna5	Mapk8	Pias1	Smpd1	Cyp2b6
Lpl	Atg4c	Egfr	Mapk9	Pik3c3	Smpd3	Cyp3a4
Lcat	Atg7	Eif2ak3	Mboat1	Pik3ca	Socs1	Cyp3a7
Lipg	Atm	Eif2s1	Mboat7	Pik3cb	Socs3	Cyp2c19
Pltp	Atp5b	Eif4b	Mbtps1	Pik3cd	Sod1	Sult1c2
Lipc	Atp6v1a	Eif4e	Mdm2	Pik3r1	Sod2	Ugt2b7
Cd36	Atp6v1b1	Eif4ebp1	Mdm4	Pik3r2	Sorbs1	Rara
Soat1	Atp6v1b2	Elmod3	Me1	Pik3r3	Sos1	Akr1b10
Soat2	Atp6v1c1	Eno4	Me2	Pik3r4	Sos2	Nr1h2
Apoc1	Atp6v1d	Ep300	Mfn2	Pla1a	Sphk1	Prdx5
Apoc2	Atp6v1h	Ern1	Mfsd2a	Pla2g12a	Sphk2	Prdx1
Apoh	Bax	Esr1	Mgll	Pla2g16	Sptlc2	Txn1
Angptl3	Bcl2l11	Esr2	Mlx	Plin1	Sqle	
Angptl4	Bdh1	Esrrg	Mlxip	Plin2	Sqstm1	
Sort1	Bdh2	Fabp1	Mlxipl	Plin3	Sqstm2	
Apob	Bdnf	Fabp2	mmp9	Plin4	Srebf1	
Pcsk9	Becn1	Fabp3	Mogat1	Plin5	Srebf2	
Ldlrap1	Bhlhb9	Fabp4	Mogat2	Pmvk	St3gal5	
Mylip	Bhmt	Fabp5	Moxd1	Pnpla2	St3gal6	
Apoe	Bid	Fabp7	Mpc1	Pnpla3	Stk11	
Lrp1	Bmi1	Fads3	Mtor	Ppara	Strada	
Lrp2	Bmp6	Faf2	Mttp	Ppard	Stradb	
Lrpap1	Bmp7	Fas	Mvd	Pparg	Stx17	
Lipa	Bnip3	Fasl	Mvk	Ppargc1a	Sucnr1	
Stard3	Bscl2	Fbxl3	Myd88	Ppargc1b	Sult1b1	
Vdac1	Casp2	Fdft1	Nadsyn	Ppp1r3b	Sult2a2	
Vdac2	Casp3	Fdxr	Nampt	Ppp2r2d	Sult2a4	
Vdac3	Casp6	Ffar4	Naprt	Ppp2r5c	Sult2a6	
Tspo	Casp7	Fgf1	Nav2	Prkaa1	Sult3a1	
Cyp27a1	Casp8	Fgfr4	Ncf2	Prkaa2	Tbl1x	
Vapa	Cat	Fitm1	Ncoa1	Prkab1	Tef	
Vapb	Cav2	Fitm2	Ncoa3	Prkab2	Tfam	
Npc1	Ccl2	Fkbp5	Ncor1	Prkag1	Tfb1	
Osbpl5	Ccnd1	Fmn2	Ncor2	Prkag2	Tfb2	
Npc2	Ccnd3	Fos	Ndufa1	Prkag3	Tgfb1	
Star	Ccr2	Foxo1	Ndufa10	Prkca	Thrb	
Apoa2	Cd44	Fto	Ndufa11	Prlr	Thrsp	
Apoc3	Cdc42	Fxn	Ndufa12	Prmt1	Tlr12	
Apoa4	Cdk2	G0s2	Ndufa13	Prodh	Tlr4	
Fmo1	Cdk4	G6pc2	Ndufa2	Pten	Tlr5	
Fmo2	Cdkn1a	Gabarap	Ndufa3	Qprt	Tm6sf2	
Fmo3	Cdkn2a	Gabarapl1	Ndufa4	Rab12	Tm7sf2	
Fmo4	Cebpa	Gabpa	Ndufa4l2	Rab30	Tmbim1	
Fmo5	Cebpb	Gabrr1	Ndufa5	Rac1	Tmed5	

Gsta2	Cel	Gadd45b	Ndufa6	Rad1	Tnfaip3
Gsta3	Cept1	Gal3st1	Ndufa7	Rad51b	Tnfrsf1a
Gsta4	Cerk	Gamt	Ndufa8	Raet1a	Tor1a
Gstk1	Cers2	Gckr	Ndufa9	Raet1b	Tor3a
Gstm1	Cers6	Gclc	Ndufab1	Raet1c	Traf2
Gstm2	Ces1c	Gclm	Ndufb10	Raet1e	Trib1
Gstm3	Ces1d	Gde1	Ndufb11	Raf1	Trib3
Gstm4	Ces1e	Gfer	Ndufb2	Rbbp4	Trp53
Gstm5	Ces1f	Ghr	Ndufb3	Rela	Trp53inp1
Gstm6	Ces1g	Gk2	Ndufb4	Relb	Tsc1
Gstm7	Ces2e	Gls2	Ndufb5	Retn	Tsc2
Gsto1	Ces3b	Gpam	Ndufb6	Rfx4	Txnip
Gsto2	Chchd6	Gpat4	Ndufb7	Rheb	Ubc
Gstp1	Chka	Gpc1	Ndufb8	Rps6	Ucp2
Gstp2	Chkb	Gpc4	Ndufb9	Rps6kb1	Ucp3
Gstt1	Chpt1	Gpcpd1	Ndufc1	Rps6kb2	Ugt1a1
Gstt2	Chuk	Gpd1	Ndufc2	Rptor	Ugt1a2
Gstt3	Cidea	Gps2	Ndufs1	Rraga	Ulk1
Hpgds	Cideb	Gpt1	Ndufs2	Rragb	Ulk2
Maoa	Cidec	Gpx1	Ndufs3	Rrm2b	Uqcr10
Maob	Clock	Gpx3	Ndufs4	Rxrb	Uqcr11
Mgst1	Cnr1	Gpx4	Ndufs5	Rxrg	Uqcrb
Mgst2	Cnr2	Gpx6	Ndufs6	S100a10	Uqcrc1
Mgst3	Col1a1	Gpx7	Ndufs7	S100a11	Uqcrc2
Akr7a5	Col20a1	Grb10	Ndufs8	Saa	Uqcrfs1
Cbr1	Col27a1	Grb14	Ndufv1	Sc5d	Uqcrh
Cbr2	Cox1	Grb2	Ndufv2	Scap	Uqcrq
Cbr3	Cox2	Grhpr	Ndufv3	Sco2	Usp7
Cyp2f2	Cox4i1	Gsk3a	Neu3	Sdha	Uvrag
Dhdh	Cox4i2	Gsk3b	Nfe2l1	Sdhb	Vamp5
Fgf21	Cox5a	Gsr	Nfkb1	Sdhc	Vldlr
Sepp1	Cox6a1	Gss	Nfkbia	Sdhd	Vmp1
Fetub	Cox6a2	Gstz1	Nfkbib	Sec13	Vnn1
Lect2	Cox6b1	Gyk	Nhej1	Sema5b	Vnn3
Postn	Cox6b2	Hdac3	Nipal1	Serinc2	Wdr24
Angptl6	Cox6c	Hes6	Nlrp3	Serp1	Wdr59
Ctsd	Cox7a1	Hfe	Nmnat1	Serpin1	Wnt1
Fgl1	Cox7a2	Hif1a	Nmnat2	Serpina3h	Wnt10b
Igf1	Cox7a2l	Hmgb1	Nmnat3	Serpina3k	Wnt11
Gdf15	Cox7b	Hmgcl	Nmrk1	Serpina9	Wnt3a
Gpnmb	Cox7b2	hmgcs1	Nmrk2	Sesn1	Wnt5a
Igfbp1	Cox7c	Hmgcs2	Nnmt	Sesn2	Wwtr1
Igfbp2	Cox8a	Hmox1	Nnt	Sgk1	Xbp1
Igfbp3	Cox8b	Hras	Nos3	Sgk2	Sulf2
Enho	Crat	Hsd17b13	Npc1l1	Sgms1	Hspa12a
Rbp4	Creb1	Hsdl7b7	Nprl2	Sirt1	Aoah
Fst	Creb3l3	Hspa5	Nqo1	Sirt2	Gsdmd
Inhbe	Crebbp	Id1	Nr1d1	Sirt3	Gpr78
Serpinb1a	Crtc1	Igf1r	Nr1d2	Sirt4	Spp1
Tsku	Crtc2	Ihh	Nr1h3	Sirt5	Irf2bp2
Smoc1	Cry1	Ikbkb	Nr1i2	Sirt6	Gcgr
Abca12	Cry2	Ikbke	Nr1i3	Sirt7	Spring1

Abcb10	Csnk1e	Ikbkg	Nr4a1	Skp2	Gpr55
Abcc12	Ctnnb1	Il17rb	Nras	Slc13a4	Cluh
Abcd2	Ctrc	Il18	Nsdhl	Slc16a1	Mfn1
Abcd3	Ctse	Il1rap	Nsmaf	Slc16a11	Opa1
Abhd2	Cxcl10	Il32	Nt5e	Slc16a13	Dnm1l
Abhd5	Cyb5r3	Il6ra	Ntf3	Slc16a2	Fam3a
Abhd6	Cyc1	Il8	Ntrk1	Slc16a5	Mtarc1
Acad11	Cycs	Ildr2	Ogdhl	Slc16a7	Nfatc4
Acat2	Cyp2a22	Ilk	Optn	Slc17a3	Camk1d
Acer2	Cyp2c67	Ins1	Orm3	Slc18a1	Klf15
Acer3	Cyp2c69	Ins2	Ormdl2	Slc1a3	Asah1
Acly	Cyp2j13	Insig1	Ormdl3	Slc22a15	Pygo1
Acmsd	Cyp2j5	Insig2	Osbpl3	Slc22a26	Prkn
Acot1	Cyp2j8	Insr	Ostc	Slc22a27	Bmp8b
Acot2	Cyp2u1	Irf5	Oxct1	Slc22a28	Mrfap1
Acot3	Cyp39a1	Irf6	Oxct2	Slc22a29	Mertk
Acot4	Cyp46a1	Irs1	P2rx3	Slc22a30	Tert
Acot5	Cyp4f14	Irs2	P2rx4	Slc22a5	Snai2
Acot6	Cyp51a	Iscu	P2ry1	Slc25a1	Pcsk7
Acot8	Cyp5b	Itch	P2ry2	Slc25a10	Thbs1
Acox2	Cyp8b1	Itih1	P2ryl3	Slc25a20	Elavl1
Acsf2	CYTB	Jun	P2yr1	Slc25a22	Met
Acsf3	Dapk1	Kdm1a	Pacrg	Slc25a32	Hepsin
Acsm1	Dbi	Kdsr	Papss1	Slc25a34	Nr5a2
Acsm3	Dbp	Klb	Paqr7	Slc25a42	Pnpla5
Adgre1	Ddit3	Klf6	Paqr9	Slc26a4	Ifng
Adipor1	Ddit4	Klf9	Park2	Slc27a1	Acta2
Adipor2	Decr1	Klk1b4	Park7	Slc27a2	Il10
Ager	Degs1	Kras	Parp1	Slc27a4	Cd68
Agpat1	Depdc5	Krt23	Parp2	Slc2a2	Csad
Agpat2	Deptor	Kynu	Pax2	Slc2a4	Col3a1
Agpat3	Dgat2	Lamb3	Pcdhb1	Slc2a9	Ccl3
Agpat4	Dhcr24	Lamp2	Pcsk6	Slc30a7	Col4a1
Agpat9	Dhcr7	Lamtor1	Pctp	Slc33a1	Nfe2l2
Ahr	Dhrs7b	Lamtor2	Pcyt1a	Slc35f1	Myc
Aifm2	Dio1	Lamtor5	Pcyt1b	Slc35f2	Vegfc
Akt1	Dio2	Lcp1	Pde1a	Slc38a9	Il13
Akt1s1	Dio3	Ldhd	Pde4d	Slc39a11	Col2a1
Akt2	Dlst	Lep	Pdgfa	Slc39a13	Retnla
Akt3	Dmgdh	Lepr	Pdk4	Slc39a4	Ym1
Alas1	Dnah11	Lgals1	Pdp1	Slc39a5	Il22
Aldh4	Dnaic1	Lgals4	Pdpk1	Slc3a2	Il17a
Apoa5	Dnajc12	Lgals6	Pecr	Slc40a1	Notch1
Apof	Dnajc15	Lpcat3	Pemt	Slc41a3	Notch2
Aqp2	Dnajc19	Lpin1	Per1	Slc44a1	Hes1
Aqp7	Dnmt3a	Lpin2	Per2	Slc47a1	Timp1
Ar	Dpt	Lpin3	Per3	Slc48a1	Cyp4a11
Arntl	Dram1	Lss	Pex11a	Slc4a9	Il6

	Men	Women	*P*-value
	48	32	
Age (years)	58.1 ± 10.4	56.1 ± 11.9	0,533
BMI (kg/m^2)	33.2 ± 5.8	38.6 ± 8.2	**< 0,001**
Waist circumference	114.8 ± 15.7	116.4 ±16.4	0,625
History of menopause		25 (78.1%)	
NASH (n=)	34 (70.8%)	27 (84.4%)	0,190
Steatosis	1.7 ± 0.8	2.0 ± 0.8	0,208
Ballooning (SAF score)	1.0 ± 0.6	1.3 ± 0.6	0,132
Lobular inflammation (SAF score)	0.9 ± 0.6	1.1 ± 0.5	0,338
NAS score	3.7 ± 1.7	4.3 ± 1.3	0,074
Fibrosis score	2.2 ± 1.2	2.1 ± 1.0	0,547
F0	4 (8.3%)	1 (3.1%)	
F1	11 (22.9%)	8 (25%)	
F2	11 (22.9%)	14 (43.8%)	
F3	17 (35.4%)	6 (18.8%)	
F4	5 (10.4%)	3 (9.4%)	
AST (UI/L)	38.0 ± 21.1	36.7 ± 23.2	0,778
ALT (UI/L)	60.7 ± 33.0	49.0 ± 27.7	0,132
T2D	31 (64.6%)	25 (78.1%)	0,223
HTA	33 (68.8%)	19 (59.4%)	0,475
Dyslipidemia	24 (50.0%)	13 (41.9%)	0,500
HbA1c (%)	7.0 ± 1.2	6.6 ± 1.3	0,242

Supplemental Table 2 Main characteristics of NAFLD patients according to sex.
Mean ± standard deviation of clinical characteristics in men and women. NASH was defined by the presence of the following three criteria: steatosis grade ≥ 1, lobular inflammation grade ≥ 1 and ballooning score ≥ 1. Associated *P*-values are given using Mann Whtiney and Fisher's exact test. NASH: Non-Alcoholic SteatoHepatitis; BMI: Body Mass Index; T2D: Type 2 Diabetes; HTA: Hypertension; AST: Aspartate AminoTransferase; ALT: Alanine AminoTransferase; HbA1c : Glycated Hemoglobin.

Gene	NCBI Refseq	Forward primer	Reverse primer
Ccl2	NM_011333	GGTGTCCCAAAGAAGCTGTAGTTTT	AGTTGTAGGTTCTGATCTCATTTGGTT
Col1a1	NM_007742	GGCTCCTGCTCCTCTTAGGG	TCGGGTTTCCACGTCTCAC
Cxcl10	NM_021274	TGCCGTCATTTTCTGCCTC	GGCCCGTCATCGATATGG
Cyp4a10	NM_010011	TCCAGCAGTTCCCATCACCT	TTGCTTCCCCAGAACCATCT
Cyp4a14	NM_007822	TCAGTCTATTTCTGGTGCTGTTC	GAGCTCCTTGTCCTTCAGATGGT
Ehhadh	NM_023737	CGTCTCCTCGGTTGGTGTTC	ATTATCTTCTTTGCAGTATCTAGCTGCTT
Elovl3	NM_007703	GCCTCTCATCCTCTGGTCCT	TGCCATAAACTTCCACATCCT
Fgf21	NM_020013.4	AAAGCCTCTAGGTTTCTTTGCCA	CCTCAGGATCAAAGTGAGGCG
Cidec	NM_178373	CATGAAGTCTCTCAGCCTCCTGTA	CAGCTGTTGGGTCACCACTG
Mogat1	NM_026713	TGCCCTATCGGAAGCTGATCTA	CAGAGTCTGCTGAACAGGGATG
Pnpla3	NM_054088	ACGCGGTCACCTTCGTGT	AGCCCGTCTCTGATGCACTT
Pparα	NM_011144	CCCTGTTTGTGGCTGCTATAATTT	GGGAAGAGGAAGGTGTCATCTG
Pparg2	NM_011146	GATGCACTGCCTATGAGCACTT	GAATGGCATCTCTGTGTCAACC
Scd1	NM_009127	CAGTGCCGCGCATCTCTAT	CAGCGGTACTCACTGGCAGA
Tbp	NM_013684	ACTTCGTGCAAGAAATGCTGAA	GCAGTTGTCCGTGGCTCTCT
Tnf	NM_013693	TCCCCAAAGGGATGAGAAGTTC	GCGCTGGCTCAGCCACT
Vnn1	NM_011704	ATGAGGTTTATGCCTTTGGAGC	CCACAGGTGCGTAAATTGGTAG

Supplementary Table 3 : primers list