

Supplementary Table S2: List of mechanistically linked steatotic genes.

Lipogenesis	
<i>ACACA</i>	acetyl-CoA carboxylase alpha
<i>ACACB</i>	acetyl-CoA carboxylase beta
<i>ACAT1</i>	acetyl-CoA acetyltransferase 1
<i>ACAT2</i>	acetyl-CoA acetyltransferase 2
<i>ACLY</i>	ATP citrate lyase
<i>AGPAT1</i>	1-acylglycerol-3-phosphate O-acyltransferase 1
<i>AGPAT2</i>	1-acylglycerol-3-phosphate O-acyltransferase 2
<i>AGPAT3</i>	1-acylglycerol-3-phosphate O-acyltransferase 3
<i>AGPAT5</i>	1-acylglycerol-3-phosphate O-acyltransferase 5
<i>AGPAT9</i>	1-acylglycerol-3-phosphate O-acyltransferase 9
<i>AGPS</i>	alkylglycerone phosphate synthase
<i>ANXA2</i>	annexin A2
<i>ANXA5</i>	annexin A5
<i>ANXA6</i>	annexin A6
<i>B4GALT5</i>	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, 5
<i>CREB1</i>	cAMP responsive element binding protein 1
<i>CREB3L3</i>	cAMP responsive element binding protein 3-like 3
<i>CREBL2</i>	cAMP responsive element binding protein-like 2
<i>DGAT1</i>	diacylglycerol O-acyltransferase 1
<i>DGAT2</i>	diacylglycerol O-acyltransferase 2
<i>ELOVL2</i>	ELOVL fatty acid elongase 2
<i>ELOVL3</i>	ELOVL fatty acid elongase 3
<i>ELOVL5</i>	ELOVL fatty acid elongase 5
<i>ELOVL6</i>	ELOVL fatty acid elongase 6
<i>FADS1</i>	fatty acid desaturase 1
<i>FADS2</i>	fatty acid desaturase 2
<i>FASN</i>	fatty acid synthase
<i>GALNT7</i>	polypeptide N-acetylgalactosaminyltransferase 7
<i>GNPAT</i>	glyceronephosphate O-acyltransferase
<i>GPAM</i>	glycerol-3-phosphate acyltransferase,
<i>GPAT2</i>	glycerol-3-phosphate acyltransferase 2,
<i>HMGB1</i>	high mobility group box 1
<i>INSIG1</i>	insulin induced gene 1
<i>INSIG2</i>	insulin induced gene 2
<i>LCAT</i>	lecithin-cholesterol acyltransferase
<i>LPIN2</i>	lipin 2
<i>MLXIPL</i>	MLX interacting protein-like
<i>MTOR</i>	mechanistic target of rapamycin
<i>NCEH1</i>	neutral cholesterol ester hydrolase 1
<i>PPAP2A</i>	phosphatidic acid phosphatase type 2A
<i>PPAP2B</i>	phosphatidic acid phosphatase type 2AB
<i>PPARG</i>	peroxisome proliferator-activated receptor gamma
<i>RHEB</i>	Ras homolog enriched in brain
<i>RPS6KA1</i>	ribosomal protein S6 kinase, 90kDa, polypeptide 1

<i>RPS6KA2</i>	ribosomal protein S6 kinase, 90kDa, polypeptide 2
<i>SCAP</i>	SREBF chaperone
<i>SCD</i>	stearoyl-CoA desaturase (delta-9-desaturase)
<i>SCD5</i>	stearoyl-CoA desaturase 5
<i>SERBP1</i>	SERPINE1 mRNA binding protein 1
<i>SPTLC1</i>	serine palmitoyltransferase, long chain base subunit 1
<i>SREBF1</i>	sterol regulatory element binding transcription factor 1
<i>TSC1</i>	tuberous sclerosis 1
<i>TSC2</i>	tuberous sclerosis 2
<i>UGCG</i>	UDP-glucose ceramide glucosyltransferase
Fatty acid oxidation/ mitochondrial stress	
<i>ACSL1</i>	acyl-CoA synthetase long-chain family member 1
<i>ACSL3</i>	acyl-CoA synthetase long-chain family member 3
<i>ACSL4</i>	acyl-CoA synthetase long-chain family member 4
<i>ACSL6</i>	acyl-CoA synthetase long-chain family member 6
<i>ASCL1</i>	achaete-scute family bHLH transcription factor 1
<i>CAT</i>	catalse
<i>CLIC1</i>	chloride intracellular channel 1
<i>CLIC4</i>	chloride intracellular channel 4
<i>CLIC6</i>	chloride intracellular channel 6
<i>CPT1A</i>	carnitine palmitoyl transferase I
<i>CPT2</i>	carnitine palmitoyl transferase II
<i>CYP24A1</i>	cytochrome P450, family 24, subfamily A, polypeptide 1
<i>CYP26A1</i>	cytochrome P450, family 26, subfamily A, polypeptide 1
<i>CYP26B1</i>	cytochrome P450, family 26, subfamily B, polypeptide 1
<i>DERL1</i>	derlin 1
<i>FAF2</i>	Fas associated factor family member 2
<i>FOXA1</i>	forkhead box A1
<i>FOXA2</i>	forkhead box A2
<i>HSDL2</i>	Hydroxysteroid Dehydrogenase Like 2
<i>MTP</i>	microsomal triglyceride transfer protein
<i>PPARA</i>	peroxisome proliferator-activated receptor alpha
<i>PPARD</i>	peroxisome proliferator-activated receptor beta or delta
<i>SOD2</i>	superoxide dismutase 2, mitochondrial
<i>TUFM</i>	Tu translation elongation factor, mitochondrial
Lipid transport	
<i>ABCA1</i>	ATP-binding cassette, sub-family A
<i>AHR</i>	aryl hydrocarbon receptor
<i>AKT1</i>	v-akt murine thymoma viral oncogene homolog 1
<i>AKT2</i>	v-akt murine thymoma viral oncogene homolog 2
<i>AQP4</i>	aquaporin 4
<i>AQP7</i>	aquaporin 7
<i>CD36</i>	CD36 molecule
<i>CNR1</i>	cannabinoid receptor 1
<i>EGFR</i>	epidermal growth factor receptor
<i>FABP1</i>	fatty acid binding protein 1
<i>FABP6</i>	fatty acid binding protein 6

<i>FABP7</i>	fatty acid binding protein 7
<i>FAT1</i>	FAT atypical cadherin 1
<i>FATP2</i>	Fatty acid transport protein 2
<i>FATP5</i>	Fatty acid transport protein 5
<i>FXR1</i>	farnesoid X receptor 1
<i>FXR2</i>	farnesoid X receptor 2
<i>LDLR</i>	low density lipoprotein receptor
<i>NR1H3</i>	nuclear receptor subfamily 1, group H, member 3
<i>NR1H4</i>	nuclear receptor subfamily 1, group H, member 4
<i>NR1I2</i>	nuclear receptor subfamily 1, group I, member 2
<i>NR5A2</i>	nuclear receptor subfamily 5, group A, member 2
<i>RXRA</i>	retinoid X receptor, alpha
<i>RXRB</i>	retinoid X receptor, beta
<i>RXRG</i>	retinoid X receptor, gamma
<i>SLC27A2</i>	solute carrier family 27 (fatty acid transporter), member 2
<i>SLC27A5</i>	solute carrier family 27 (fatty acid transporter), member 5
<i>THR</i>	thyrotropin-releasing hormone
Biomarkers	
<i>COL4A4</i>	collagen, type IV, alpha 4
<i>COL4A6</i>	collagen, type IV, alpha 6
<i>FGF21</i>	fibroblast growth factor 21
<i>GGT1</i>	gamma-glutamyltransferase
<i>GLUD1</i>	glutamate dehydrogenase 1
<i>GLUD2</i>	glutamate dehydrogenase 2
<i>GOT1</i>	glutamic-oxaloacetic transaminase 1
<i>GPT</i>	glutamic-pyruvate transaminase
<i>GSTA1</i>	glutathione S-transferase 1
<i>KRT18</i>	keratin 18
<i>KRT8</i>	keratin 8
<i>LAMA1</i>	laminin, alpha
<i>LAMB1</i>	laminin, beta
<i>LAMC1</i>	laminin, gamma
<i>LDHA</i>	lactate dehydrogenase A
<i>MIR122</i>	microRNA 122
<i>TIMP1</i>	TIMP metalloproteinase inhibitor 1
<i>TXN1</i>	thioredoxin 1
<i>TXN2</i>	thioredoxin 2
LD growth/ER stress	
<i>ABHD5</i>	abhydrolase domain containing 5
<i>ABHD6</i>	abhydrolase domain containing 6
<i>ABHD12</i>	abhydrolase domain containing 12
<i>ACTB</i>	actin, beta
<i>APOB</i>	apolipoprotein B
<i>APOE</i>	apolipoprotein E
<i>ARFGAP1</i>	ADP-ribosylation factor GTPase activating protein 1
<i>ATG5</i>	autophagy related 5
<i>ATG7</i>	autophagy related 7

CAV1	Caveolin1
CAV2	Caveolin2
CIDEB	cell death-inducing DFFA-like effector b
CIDEC	cell death-inducing DFFA-like effector c
DNAAF1	dynein, axonemal, assembly factor 1
DNAH3	Dyenin
DST	dystonin
DYNC1H1	Dyenin
DYNC1H3	Dyenin
DYNC2H1	Dyenin
DYNLL1	dynein, light chain, LC8-type 1
DYNLL2	dynein, light chain, LC8-type 2
ERLIN1	ER lipid raft associated 1
ERLIN2	ER lipid raft associated 2
ERP29	endoplasmic reticulum protein 29
FITM1	fat storage-inducing transmembrane protein 1
FITM2	fat storage-inducing transmembrane protein 2
FLOT1	flotillin 1
HILPDA	hypoxia inducible lipid droplet-associated
KIF1A	Kinesin
LIPE	lipase, hormone-sensitive
LPL	lipoprotein lipase
MAP1LC3B	microtubule-associated protein 1 light chain 3 beta
MGLL	monoglyceride lipase
NAPA	N-ethylmaleimide-sensitive factor attachment protein, alpha
NSF	N-ethylmaleimide-sensitive factor
PDIA3	protein disulfide isomerase family A, member 3
PKA	protein kinase, cAMP-dependent, catalytic, alpha
PKD	Protein kinase D
PLD1	Phospholipase D1
PLIN1	Perilipin 1
PLIN2	Perilipin 2
PLIN3	Perilipin 3
PLIN4	Perilipin 4
PLIN5	Perilipin 5
PNPLA2	patatin-like phospholipase domain containing 2
PNPLA3	patatin-like phospholipase domain containing 3
RAB11A	Rab family protein 11A
RAB18	Rab family protein 18
RAB32	Rab family protein 32
RAB35	Rab family protein 35
RAB5A	Rab family protein 5A
RAB7A	Rab family protein 7A
SEC22A	SEC22 vesicle trafficking protein homolog A
SEC22B	SEC22 vesicle trafficking protein homolog B
SEC22C	SEC22 vesicle trafficking protein homolog C
SNAP23	synaptosomal-associated protein, 23kDa

<i>SNAP25</i>	synaptosomal-associated protein, 25kDa
<i>SNCA</i>	synuclein, alpha
<i>SNCG</i>	synuclein, gamma
<i>STX5</i>	syntaxin 5
<i>TUBB</i>	tubulin, beta class I
<i>TUBB2A</i>	tubulin, beta 2A class IIa
<i>USP20</i>	ubiquitin specific peptidase 20
<i>USP33</i>	ubiquitin specific peptidase 33
<i>VAMP2</i>	vesicle-associated membrane protein 2
<i>VAMP3</i>	vesicle-associated membrane protein 3
<i>VAMP4</i>	vesicle-associated membrane protein 4
<i>VIM</i>	vimentin
<i>VTI1B</i>	vesicle transport through interaction with t-SNAREs 1B
Inflammation and signalling events	
<i>ARG1</i>	arginase 1
<i>ARG2</i>	arginase 2
<i>CCL2</i>	chemokine (C-C motif) ligand 2
<i>CCR2</i>	chemokine (C-C motif) receptor 2
<i>CEBPA</i>	CCAAT/enhancer binding protein, alpha
<i>CRP</i>	C-reactive protein
<i>CTSD</i>	cathepsin D
<i>CTSS</i>	cathepsin S
<i>CXCL1</i>	chemokine (C-X-C motif) ligand 1
<i>CXCL2</i>	chemokine (C-X-C motif) ligand 2
<i>CXCL3</i>	chemokine (C-X-C motif) ligand 3
<i>CXCL6</i>	chemokine (C-X-C motif) ligand 6
<i>CXCL9</i>	chemokine (C-X-C motif) ligand 9
<i>CXCL10</i>	chemokine (C-X-C motif) ligand 10
<i>CXCL13</i>	chemokine (C-X-C motif) ligand 13
<i>CXCL14</i>	chemokine (C-X-C motif) ligand 14
<i>EIF2AK2</i>	eukaryotic translation Initiation Factor 2alpha
<i>EIF2AK3</i>	eukaryotic translation Initiation Factor alpha, kinase3
<i>EIF2B1</i>	eukaryotic translation initiation factor 2B, 1 alpha
<i>EIF2S1</i>	eukaryotic translation initiation factor 2, 1 alpha
<i>EIF2S3</i>	eukaryotic translation initiation factor 2, 3 gamma
<i>HIF1A</i>	hypoxia inducible factor 1, alpha subunit
<i>IL1A</i>	interleukin 1A
<i>IL6</i>	interleukin 6
<i>IL8</i>	interleukin 8
<i>IL17A</i>	interleukin 17A
<i>IL18</i>	interleukin 18
<i>IL10</i>	interleukin 10
<i>IL12A</i>	interleukin 12A
<i>IL32</i>	interleukin 32
<i>JAK1</i>	Janus kinase 1
<i>JAK2</i>	Janus kinase 2

JAK3	Janus kinase 3
MAPK1	mitogen-activated protein kinase 1
MAP2K2	mitogen-activated protein kinase kinase 2
MAPK8	mitogen-activated protein kinase 8
MAPK9	mitogen-activated protein kinase 9
MAPK10	mitogen-activated protein kinase 10
NFKB1	nuclear factor of kappa light polypeptide gene enhancer in Bcells1
NOS2	nitric oxide synthase 2, inducible
PEBP1	phosphatidylethanolamine binding protein 1
PI3KC2A	phosphatidylinositol-4-phosphate 3-kinase, type 2 alpha
PRDX6	peroxiredoxin 6
PRKAA1	protein kinase, AMP-activated, alpha 1 catalytic subunit
PRKAA2	protein kinase, AMP-activated, alpha 2 catalytic subunit
PRKAB1	protein kinase, AMP-activated, beta 1 non-catalytic subunit
PRKAB2	protein kinase, AMP-activated, beta 2 non-catalytic subunit
PRKACA	protein kinase, cAMP-dependent, catalytic, alpha
PRKAG1	protein kinase, AMP-activated, gamma 1 non-catalytic subunit
PRKAG2	protein kinase, AMP-activated, gamma 2 non-catalytic subunit
PRKAG3	protein kinase, AMP-activated, gamma 3 non-catalytic subunit
PRKD1	protein kinase D1
PTEN	phosphatase and tensin homolog
PTGER2	prostaglandin E receptor 2
RHOA	ras homolog family member A
RHOB	ras homolog family member B
ROCK1	Rho-associated, coiled-coil containing protein kinase 1
ROCK2	Rho-associated, coiled-coil containing protein kinase 2
SERPINE1	serpin peptidase inhibitor, clade E member 1
SERPINE2	serpin peptidase inhibitor, clade E member 2
SOCS1	suppressor of cytokine signaling 1
SOCS2	suppressor of cytokine signaling 2
SOCS3	suppressor of cytokine signaling 3
STAT1	signal transducer and activator of transcription 1
STAT3	signal transducer and activator of transcription 3
STAT4	signal transducer and activator of transcription 4
STAT5A	signal transducer and activator of transcription 5A
STAT5B	signal transducer and activator of transcription 5B
STIP1	stress-induced phosphoprotein 1
TGFB1	transforming growth factor, beta 1
TGFB2	transforming growth factor, beta 2
TGFBR2	transforming growth factor, beta receptor II
TLR4	toll-like receptor 4
TNFA	tumor necrosis factor a
TNFAIP2	tumor necrosis factor, alpha-induced protein 2
TNFAIP8	tumor necrosis factor, alpha-induced protein 8
UBXN4	UBX domain protein 4
UCP2	uncoupling protein 2
VCAN	versican

Glucose metabolism	
<i>ANGPTL4</i>	angiopoietin-like 4
<i>CES1</i>	carboxylesterase 1
<i>ENO1</i>	Enolase1
<i>ENO3</i>	Enolase3
<i>FOXO1</i>	forkhead box O1
<i>GK</i>	glycerol kinase
<i>HNF4A</i>	hepatocyte nuclear factor 4, alpha
<i>IRS1</i>	Insulin receptor substrate1
<i>IRS2</i>	Insulin receptor substrate2
<i>PDK4</i>	Pyruvate dehydrogenase kinase, isozyme 4
<i>PGAM1</i>	phosphoglycerate mutase 1
<i>PKLR</i>	pyruvate kinase
<i>SLC2A1</i>	solute carrier family 2, member 1
<i>SLC2A10</i>	solute carrier family 2, member 10
<i>SLC2A5</i>	solute carrier family 2, member 5
<i>TXNIP</i>	thioredoxin interacting protein