

### Supplementary Table1: Genes of Interest

<i>Aars</i>	alanyl-tRNA synthetase
<i>Abcd3</i>	ATP-binding cassette, sub-family D (ALD), member 3
<i>Abcg2</i>	ATP-binding cassette, sub-family G (WHITE), member 2
<i>Acaa2</i>	acetyl-Coenzyme A acyltransferase 2
<i>Acaca</i>	acetyl-Coenzyme A carboxylase alpha
<i>Acas2</i>	acetyl-Coenzyme A synthetase 2 (ADP forming)
<i>Acat1</i>	acetyl-Coenzyme A acetyltransferase 1
<i>Acat2</i>	acetyl-Coenzyme A acetyltransferase 2
<i>Abcd3</i>	acyl-Coenzyme A binding domain containing 3
<i>Ace2</i>	angiotensin I converting enzyme (peptidyl-dipeptidase A) 2
<i>Adcy3</i>	adenylate cyclase 3
<i>Adcy7</i>	adenylate cyclase 7
<i>Adig</i>	adipogenin
<i>Adn</i>	adipsin
<i>Adipoq</i>	adiponectin
<i>Akap2</i>	A kinase (PRKA) anchor protein 2
<i>Akr1c1</i>	aldo-keto reductase family 1, member C1
<i>Akr1c18</i>	aldo-keto reductase family 1, member C18
<i>Aldh18a1</i>	aldehyde dehydrogenase 18 family, member A1
<i>Apoa1</i>	apolipoprotein A-1
<i>Apoc3</i>	apolipoprotein C-2
<i>ApoE</i>	apolipoprotein E
<i>Atad3</i>	ATPase family, AAA domain containing 3A

*Atf3*      activating transcription factor 3

*Atf4*      activating transcription factor 4

*Atf5*      activating transcription factor 5

*Atp1a2*    ATPase, Na<sup>+</sup>/K<sup>+</sup> transporting, alpha 2 polypeptide

*Atp2b1*    ATPase, Ca<sup>++</sup> transporting, plasma membrane 1

*Atp2b3*    ATPase, Ca<sup>++</sup> transporting, plasma membrane 3

*Atp8a1*    ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1

*Bcat1*      branched chain aminotransferase 1, cytosolic

*C2*        complement component 2 (within H-2S)

*C3*        complement component 3

*Cabc1*     chaperone, ABC1 activity of bc1 complex like (*S. pombe*)

*Camk2g*    calcium/calmodulin-dependent protein kinase II, gamma

*Camkk1*    calcium/calmodulin-dependent protein kinase kinase 1, alpha

*Casp12*    calcium regulated heat stable protein 1

*Cav1*      caveolin, caveolae protein 1

*Ccbe1*     collagen and calcium binding EGF domains 1

*Ccna2*     cyclin A2

*Ccnb2*     cyclin B2

*Cd44*      CD44 antigen

*Cd72*      CD72 antigen

*Cdc20*     cell division cycle 20 homolog (*S. cerevisiae*)

*Cdc2a*     cell division cycle associated 2

*Cdkn1a*    cyclin-dependent kinase inhibitor 1A (P21)

*Cdkn1c*    cyclin-dependent kinase inhibitor 1C (P57)

*Cdo1*      cysteine dioxygenase 1, cytosolic

*Ces3* carboxylesterase 3

*Cidea* cell death-inducing DNA fragmentation factor, alpha subunit-like effector A

*Cidec* cell death-inducing DNA fragmentation factor, alpha subunit-like effector C

*Clcn3* chloride channel 3

*Clr* complement component 1, r subcomponent

*Clu* clusterin

*Cox6a2* cytochrome c oxidase, subunit VI a, polypeptide 2

*Cox7a1* cytochrome c oxidase, subunit VIIa 1

*Cox8b* cytochrome c oxidase, subunit VIIIb

*Creb3l2* cAMP responsive element binding protein 3-like 2

*Cyp11a* cytochrome P450, family 11, subfamily a, polypeptide 1

*Cyp11b1* cytochrome P450, family 11, subfamily b, polypeptide 1

*Cyp11b2* cytochrome P450, family 11, subfamily b, polypeptide 2

*Cyp27a1* cytochrome P450, family 27, subfamily a, polypeptide 1

*Cyp7b1* cytochrome P450, family 27, subfamily a, polypeptide 3

*Ddc* dopa decarboxylase

*Dhcr7* 7-dehydrocholesterol reductase

*Dial* diaphorase 1 (NADH)

*Ehhadh* enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coenzyme A dehydrogenase

*Elmo1* engulfment and cell motility 1

*Elov16* ELOVL family member 6, elongation of long chain fatty acids (yeast)

*Emb* embigin

*Eya1* eyes absent 1 homolog (Drosophila)

*Fabp4* fatty acid binding protein 5

*Fabp5* fatty acid binding protein 5

*Fam161a* family with sequence similarity 161, member A

*Fasn* fatty acid synthase

*Fgfr11* fibroblast growth factor receptor-like 1

*Gdf15* growth differentiation factor 15

*Gpd1* glycerol-3-phosphate dehydrogenase 1 (soluble)

*Guca1b* guanylate cyclase activator 1B

*H2-Aa* histocompatibility 2, class II antigen A, alpha

*H2-Ab1* histocompatibility 2, class II antigen A,beta1

*H2-* histocompatibility 2, class II, locus Mb1 /// histocompatibility 2, class II,

*DMb1* locus Mb2

*H2-Eb1* histocompatibility 2, class II antigen E beta

*Hdlbp* high density lipoprotein binding protein

*Hmgcr* 3-hydroxy-3-methylglutaryl-Coenzyme A reductase

*Hmgcs2* 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 2

*hrasls* HRAS-like suppressor

*Hsbp8* heat shock 27kDa protein 8

*Hsd17b7* hydroxysteroid (17-beta) dehydrogenase 7  
hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase

*Hsd3b7* 7

*Igf1r* insulin-like growth factor I receptor

*Igfbp3* Insulin-like growth factor binding protein 3

*Ii*  
(CD74) Ia-associated invariant chain

*Impdh1* inosine 5'-phosphate dehydrogenase 1

*Inha* inhibin alpha

*Insig1* insulin induced gene 1

*Insm1* insulinoma-associated 1

*Irs1* insulin receptor substrate 1

*Itga6* integrin alpha 6

*Jun* Jun oncogene

*Kcnk1* potassium channel, subfamily K, member 1

*kcnk3* potassium channel, subfamily K, member 3

*Kcnq2* potassium voltage-gated channel, subfamily Q, member 2

*Kctd14* potassium channel tetramerisation domain containing 14

*Ldlr* low density lipoprotein receptor

*Ldlrap1* low density lipoprotein receptor adaptor protein 1

*Lipe* lipase, hormone sensitive

*Lpl* lipoprotein lipase

*Lrp10* low-density lipoprotein receptor-related protein 10

*Lrp8* low density lipoprotein receptor-related protein 8, apolipoprotein e receptor

*Lrpap1* low density lipoprotein receptor-related protein associated protein 1

*Mapk13* mitogen activated protein kinase 13

*Mki67* antigen identified by monoclonal antibody Ki 67

*Mlp* MARCKS-like protein

*Mpp6* membrane protein, palmitoylated 6 (MAGUK p55 subfamily member 6)

*Mrap* melanocortin 2 receptor accessory protein

*Nceh1* neutral cholesterol ester hydrolase 1

*Npc1* Niemann Pick type C1

*Nr1h4* nuclear receptor subfamily 1, group H, member 4 (fxr)

*Nr5a1* nuclear receptor subfamily 5, group A, member 1 (SF1)

*Nusap1* nucleolar and spindle associated protein 1

*Osbp13* oxysterol binding protein-like 3 (ORP3)

*Osbp16* oxysterol binding protein-like 6 (ORP3)

*Pck1* phosphoenolpyruvate carboxykinase 1, cytosolic

*Pcolce* procollagen C-proteinase enhancer protein

*Pde8b* phosphodiesterase 8b

*Pdk4* Pyruvate dehydrogenase kinase, isoenzyme 2

*Plin4* perilipin 4

*Pmvk* phosphomevalonate kinase

*Pon1* paraoxonase 1

*Ppara* peroxisome proliferator activated receptor alpha

*Pparg* peroxisome proliferator activated receptor gamma

*Prkar1a* protein kinase, cAMP dependent regulatory, type I, alpha

*Prkar2b* protein kinase, cAMP dependent regulatory, type II beta

*Prkcd* protein kinase C, delta

*Prkg2* Protein kinase, cGMP-dependent, type II

*Pygl* liver glycogen phosphorylase

*Rab10* RAB10, member RAS oncogene family

*Rab2b* RAB2B, member RAS oncogene family

*Rbbp8* retinoblastoma binding protein 8

*Rcc2* regulator of chromosome condensation 2

*Ren1* renin 1 structural /// renin 2 tandem duplication of Ren1

*Rgs11* regulator of G-protein signaling 11

*Rgs4* regulator of G-protein signaling 4

*Rhod* ras homolog gene family, member D

*Rras2* related RAS viral (r-ras) oncogene homolog 2

*S100a1* S100 calcium binding protein A1

sterol-C5-desaturase (fungal ERG3, delta-5-desaturase) homolog (S.

*Sc5d* cerevisiae)

*Scarb1* scavenger receptor class B, member 1

*Scd1* stearoyl-Coenzyme A desaturase 1

*Scn3b* sodium channel, voltage-gated, type III, beta

*Scp2* sterol carrier protein 2, liver

*Sdc1* syndecan 1

*Sdc3* syndecan 3

*Shh* sonic hedgehog

*Shmt1* serine hydroxymethyl transferase 1 (soluble)

*Slc12a2* solute carrier family 12, member 2

*Slc23a2* solute carrier family 23, member 2

*Slc27a1* Solute carrier family 27 (fatty acid transporter), member 1

*Slc39a11* solute carrier family 39 (metal ion transporter), member 11

*Slc4a4* Solute carrier family 4 (anion exchanger), member 4

*Slc6a8* solute carrier family 6, member 8

*Slco3a1* solute carrier organic anion transporter family, member 3a1

*Sorbs1* sorbin and SH3 domain containing 1

*Spbc25* spindle pole body component 25 homolog (S. cerevisiae)

*Sqle* squalene epoxidase

*Srd5a1* steroid 5 alpha-reductase 1

*Srd5a2* steroid 5 alpha-reductase 2

*Srebfl* sterol regulatory element binding factor 1

<i>Star</i>	steroidogenic acute regulatory protein
<i>Stard10</i>	START domain containing 10
<i>Stard6</i>	StAR-related lipid transfer (START) domain containing 6
<i>Stx11</i>	syntaxin 11
<i>Stx17</i>	syntaxin 17
<i>Thea</i>	thioesterase, adipose associated
<i>Trib3</i>	tribbles homolog 3 (Drosophila)
<i>Tsc22d1</i>	TSC22 domain family 1
<i>Tspo</i>	Translocator protein (benzodiazepine peripheral receptor)
<i>Ucp1</i>	uncoupling protein 1 (mitochondrial, proton carrier)
<i>Vdac1</i>	voltage-dependent anion channel 1
<i>Vldlr</i>	very low density lipoprotein receptor
<i>Xpot</i>	exportin, tRNA (nuclear export receptor for tRNAs)