

Gene Name /Gene Symbol	Sense Primer	Antisense Primer
Fatty Acid/Glucose Metabolism		
Acyl-Coenzyme A dehydrogenase, very long chain (ACAVDL)	GGCCGCCCTGCAGTCT	TGCTTTTGAAGTTGCGGTAGAG
Monoglyceride lipase (MGLL)	AGTCACCAACTCCGTCTTCCA	CTGCCGTGGCTGTCTTTT
Enoyl Coenzyme A hydratase 1 (ECH1)	CACGACTGAGAACAAGGAATGAA	GCGAGGGCTCTCAGAGCTT
Carnitine palmitoyltransferase 1A, liver (CPT1A)	GCAGCAAGTGGAGCTGTTTG	CCTCCGCTGGACACGFACTC
Mitochondrial trifunctional protein (HADHA)	TCCGCCTGGTGACAAGATTT	GCCAAGATCCCCTCTTGCA
Adipose differentiation related protein (ADFP)	CACACCCTCCTGTCCAACATC	CCATGTGCTTGGCTTGATCTT
Acetyl-Coenzyme A acyltransferase (ACAA2)	GGAGGAGCCATTGCTTTGG	AGGTGTGCAGTAATTCTTGATCCA
PPAR γ angiopoietin related protein (ANGPTL4)	CGTTGCCTCCTGAGATCGA	CCTTGGTCCACGCCTCTAGA
Aldo-keto reductase ,family 1, member B10 (AKR1B10)	CCTGGTGAGATTATACAGGAGATTCTC	AAAATGGGACATGAGTGGAGGTA
Methylcrotonoyl-Coenzyme A carboxylase 1 (MCCC1)	CAGCAAGGAAATGGCCAGTT	GGAGGCACTTCTCTTTTTGG
Cellular transport		
Aquaporin 3 (AQP3)	AGACAGCCCCTTCAGGATTC	GGCAAGTGGCCTAAGGTGCTA
Glycolysis		
Aldolase B (ALDOB)	TCCACCCAGTCGCTCTTCAC	CTAGGCTGGCGGGCATT
Cell Proliferation		
Insulin induced gene 1 (INSIG1)	AGCAGCGAGTGAATCTTTAAAACA	CCGGTTTCGGAGAGAAAGACT
Insulin-like growth factor binding protein 3 (IGFBP3)	TGTCC CCTTAGCACAATGTAAAAA	CCCCAGCAAGCCATTCC
Electron Transport		
Cytochrome P450, family 1,subfamily B, polypeptide 1 (CYP1B1)	TCATGAATGCTTTTAGTGTGTCAT	GTTGTTTCCCAGAATGTACTTTGT
Electron-transfer-flavoprotein , α -polypeptide (ETF α)	AAAGCATGGAGAGCTACATTTCATAA	CATAAACAAGCATTCTGGCATCTG
Electron-transfer-flavoprotein , β -polypeptide (ETF β)	TGGTCACGGATGGTGTGAAG	TCCACCGCATCTCACAGA
CGI-44 protein; sulfide dehydrogenase like (SQRD1)	GCACGAAGGACTTGGAACCTAT	GGAGGCATTGGTCAACCATT
Inflammatory response		
C-Reactive protein, pantraxin-related (CRP)	GGA GCCAAGGGATTGACAAA	CCA GACAAGGCTGATTCAGAGA
Chemokine ligand 1 ,CXC3L (Fractalkine)	TTCACAGATGGGTGCTTGGA	CACAGCGTTTTFCTCTCTATGG
Tumor necrosis factor superfamily, member 21 (TNFRSF21)	GGGCTGGAGAAATGAAATCCT	GCCCAGTTGTCAAGCCACTT
Prostaglandin-endoperoxidase synthase 2 (PTGS2)	CAAAGAATATTGTCTCATTAGCCTGAA	TCCACAGATCCCTCAAAACATTT
Oxidative Stress		
Catalase (CAT)	CCTGTGCAGCGAAGCTTAGC	CACAGGAGAATCTTCATCCAGTGA
Metallothionein 1F (MTF1)	AGGACAACTTTCTCCCAGA	GTAGCAAATGGGTCAAGGTG
Sequestosome 1 (SQSTM1)	GGCTCTGGACACCATCCAGTA	GTGGGCAAAAGTGGTCACAA
Signal Transduction		
Regulator of G protein signaling 4 (RGS4)	GGAAGAGACAAGCCGGAACA	TCTGGGCCTCATCAAAGCA
Growth differentiation factor 15 (GDF15)	CCGAGCCTGGTTAGCA	CACTCCGAAGACTCCAGATTCC
Neuromedin B (NMB)	CAGACACAACAGCGTGGCTTA	GGGTCCATTGAGCACCTT
Cytolysis		
Monocyte to macrophage differentiation associated (MMD)	CTG GCGAGTTAAATAGGCAAGGT	GATGTTGAGAATCATGCAGATAGG A
Regulation of Transcription		
Inhibitor of DNA binding 4 (ID4)	GACTGGTTTAAAACCTCCAGAAGGAA	GGATTTTGTAGCATTCTTAGAAAC AACA
v-myc myelocytomatosis viral oncogene homolog (avian) (MYC)	TCGGACACCGAGGAGAATG	CCTCTGGCGCTCCAAGAC
Cell Motility		
Vanin 1 (VNN1)	TGCAAAGCATGCCCTCTG	GCTGGCATAGATCACTACTGCAA
Cytoskeleton Organization		
Carbohydrate sulfotransferase 6 (CHST6)	GCAGCCAACATCACTCAGGAT	AGTGTTCGAAGCCATTTTGT
Keratin 6B (KRT6B)	CCTGTTCCACTGAGCTCCTGTT	TTCGCATGTCTGAGTGTGAT
Cell Cycle Regulation		
Transforming growth factor, alpha (TGFA)	TCCCTGGGCCAGATATGTG	TCCGTTGATTGGTCTCTAAGCA
Cell Adhesion		
Galectin 4 (LGALS4)	CCAGCACCTCTTTGACTTGC	CAATGTGTCCACCCTCTGGAA
Transport		
Transcobalamin 1 (TCN1)	CTTTCCTCAGCTGCATAAAATCC	AAGAAGAAGGCATAAGGACAATAA

		ACA
Other		
C10 open reading frame 10 (C10orf10)	CCACCCTCAAAGCCCATGT	TGCATTTGCTAAGACTCCATGTG
Phosphodiesterase 10A (PDE10A)	GATCCATAACGTAGCTAAGGCATCT	TCTCCAGTAGTTTTTGGTCAGCAA
Glomerular Epithelial Protein 1 (GLEPP1)	ACTCCAAAGACCACATCATCGA	AGATAGGGCTCAGGCCGTTTGT
Supplemental Figure 1 and 2 Genes	CCGCAGCGAGGACGTAAT	CTTGTACACGGAGCCATCCA
Glucokinase (GCK)	CCGCAGCGAGGACGTAAT	CTTGTACACGGAGCCATCCA
Glucose Transporter 2 (GLUT2)	TTTTCTGGAAAGACTGATTGTTTT	AGGAAATGTCAAAGGAGACGATTATT
AMP-Activated Protein Kinase (AMPK)	GGCACCTCCCATTGATG	ACACCCCTCGGATCTTCTT
Insulin (INS)	GGGTC CCGTCCCAAGGT	TCACCGAGTCGATGGTCTTCT
Insulin Receptor (INSR)	GGGTCCCTGTCCCAAGGT	TCACCGAGTCGATGGTCTTCT
Insulin Receptor Substrate-1 (IRS1)	GCAACCAGAGTGCCAAAGTGA	GGAGAAAGTCTCGGAGCTATGC
Insulin Receptor Substrate-2 (IRS2)	GCGGTCTCTGGCCTTATT	CCTGCACTGGAATCCAACAA
Acyl-CoA oxidase (ACOX1)	GCAGCAGGACGCTTCTTC	GCATAAGTGCCAATGATCTCCAA
Acetyl-CoA Carboxylase 2 (ACC2)	CCATCCGTCTCGGCCTTATT	GGCCTCGGATGGTCTTGAC
Pyruvate Carboxylase (PC)	AAGATGTGCTCTCAGCAGCTATGT	AGGCGAGTATTCAGGCTATCCA
Sterol Regulatory Element Binding Factor 1 (SREBF1)	CGGAACCATCTTGGCAACA	GCCGGTTGATAGGCAGCTT
Peroxisome Proliferator Activated Receptor alpha (PPARA)	TTTGCCATGAAGTTCAATGCA	AGCAGCCACAAAAAGGGAGAT
Peroxisome Proliferator Activated Receptor alpha (PPARG)	TCAGGGCTGCCAGTTTCG	GCTTTTGGCATACTCTGTGATCTC
Uncoupling protein-2 (UCP2)	GGTTCCTGGAACGTGGTGAT	AGCCATGAGGGCTCGTTTC
Peroxisome Proliferator γ Coactivator 1 (PGC1)	TGAAGAGCGCCGTGTGATT	CAGTTCTGTCCGTGTTGTGTCA
Synaptosomal-associated protein 25 (SNAP25)	GGCCGAAGACGCAGACAT	GTCAGCCCTTCGCTGCAT
Syntaxin-1 (STX1)	GGCTGCAGTCAGTCCCTCAA	CAAGACAACAGGAGCCACCAT
Syntaxin-4 (STX4)	TCGGCCCCGGCACAGT	TGTCGTGCAGCTCACGAATCAT
B-cell CLL/lymphoma 2 (BCL2)	TGCGGCCTCTGTTTGATTTC	GGGCCAAACTGAGCAGAGTCT
Bcl-2 Associated X Protein (BAX)	CCAAGGTGCCGGAAGTGA	CCCGGAGGAAGTCCAATGT
Inhibitor of KappaB Kinase Beta (IKBKB)	TTATTGACCTAGGATATGCCAAGGA	CCCCACGAATGATGTGCAA
TATA Box Binding Protein (TBP)	GGGCATTATTTGTGCACTGAGA	TAGCAGCACGGTATGAGCAACT

Supplemental Table 2. Oligonucleotide primer sequences used for quantitative real time PCR analysis. Both sense (forward) and antisense (reverse) primer sequences are shown. Genes were placed on appropriate categories based on gene ontology classification and gene symbols are indicated in the parentheses.