

**Additional file 1: Sequence of primer sets used to validate microarray results for selected genes by quantitative real-time PCR.** Gene symbol and GenBank accession number for each pig gene are indicated. Putative exon location\* is based on human gene structure information.

<b>Gene Symbol</b>	<b>Gene Name</b>	<b>Forward Primer</b>	<b>Exon*</b>	<b>Reverse Primer</b>	<b>Exon*</b>	<b>GenBank</b>
<b>ACACA</b>	Acetyl-CoA carboxylase 1	CCCGAGCTGACCGATGG	E1	GAGCGAACACCGTCTTCCTC	E1	NM_001114269
<b>ADIPOR2</b>	Adiponectin receptor protein 2	GCCCACCATGCAATGGA	E3	GAGGGATTACTCGCCATCGA	E4	NM_001007192
<b>AGPAT2</b>	1-acyl-sn-glycerol-3-phosphate acyltransferase beta	GGGCACACGGAATGACAAC	E4	GGAGTCGTAGAAGGAGGAGAAGCT	E5	NM_001130534
<b>APOE</b>	Apolipoprotein E	TGCAGTCCCTGTCTGACCAA	E3	GTAGGCCTTCACCTCCTTCATG	E4	NM_214308
<b>AQP4</b>	Aquaporin 4	TGGGAAAACCACTGGATATATTGG	E4	GCCGCCGGCAAGGA	E5	NM_001110423
<b>CEBPD</b>	CCAAT/enhancer binding protein delta	CGACTTCAGCGCCTACATAGACT	E1	TGTTGAAGAGGTCAGCGAAGAG	E1	XM_001925928
<b>CES3</b>	Liver carboxylesterase 1 precursor (ACAT)	CGCTGCGCATGAAAACG	E4	GTGCTGAAGAATCCCCAGATG	E5	NM_214246
<b>CIDEA</b>	Cell death activator CIDE-A	CACACCGCCCAGGTGACT	E5	CAGCATTCCGGAGCATGTACGT	E5	NM_001112696
<b>DGAT2</b>	Diacylglycerol O-acyltransferase homolog 2	CTTTGAGGAGGGTCTCTGGG	E6	GCCTCGGCCGTGGAAG	E6	XM_001925093
<b>ELOVL6</b>	Long-chain fatty-acyl elongase family member 6	TGAAATTGGGCAAACACTGTGT	E5	AGGGCACTTTAAGCACCTCTACA	E5	AK232419
<b>FABP4</b>	Fatty acid-binding protein, adipocyte	CCAGTGAAAACCTTTGATGATTACATGA	E1	TGATGATCAGGTTGGGTTTGG	E2	XM_001927334
<b>FASN</b>	Fatty acid synthase	CCTGCCACAACCTCAAAGACA	E12	ATGAAGTAGGAGTGGAAGGCGA	E13	NM_001099930
<b>IGFBP5</b>	Insulin-like growth factor binding protein 5 precursor	CGCAAGGGATTCTACAAGAGAAA	E3	TCCACGCACCAGCAGATG	E4	NM_214099
<b>IRS2</b>	Insulin receptor substrate-2	AACAGTGTTCCTTTTTCGGTACGT	E2	TGTCCCAAGAGCCAGAAATATACTT	E2	AY690661
<b>LIPE</b>	Hormone sensitive lipase	CGTCAAGAATCCCTTCATGTCA	E9	GCGCAGGCCACAATGTG	E10	NM_214315
<b>LPIN1</b>	Lipin 1	CAGAACCTTTTTATGCTGCTTTTG	E18	CAGGGACACTCCCCTTGCT	E19	NM_001130734
<b>LRP11</b>	Low-density lipoprotein receptor-related protein 11 precursor	GAACTTAAGATGTTTGTCTCTACATGTG	E7	ATGGCTATAGGTGACATCCTTCTATATAAA	E7	XM_001928988
<b>MEF2A</b>	Myocyte-specific enhancer factor 2A	CCGTTTGGCGGCACAA	E1	CGTTCAGGGAAAAATTGAGATTAAC	E1	NM_001097421

<b>NPC1</b>	Niemann-Pick C1 protein precursor	CCTCCCTGTCTTACTCAGTTACATAGG	E24	CGCTCTTGAGTGGCCAGACT	E25	NM_214322
<b>PIK3C2A</b>	Phosphoinositide-3-kinase, class 2, alpha polypeptide	CTGAGGAACCCAATGTAGATC	E1	CTAGAGATTCTTAAAAAGGCAGTAA	E1	NM_213939
<b>PIK3R1</b>	Phosphatidylinositol 3-kinase regulatory alpha subunit	GGTTGGAGGAGGACCTGAAGA	E12	GCTGTTTCATGCGCTTGTCAA	E12	AJ555826
<b>PPARD</b>	Peroxisome proliferator activated receptor delta	TGATAGTGACCTGGCTCTCTTCAT	E7	GCCTCCACCTGTGACACGTT	E8	NM_001130241
<b>PPARG</b>	Peroxisome proliferator activated receptor gamma	CCTGGCGATATTTATAGCTGTCATT	E7	CTCGATGGGCTTCACATTCA	E8	NM_214379
<b>PPARGC1A</b>	Peroxisome proliferator activated receptor gamma coactivator 1 alpha	GAGTCTGAAAGGGCCAAGCA	E10	CAGTTCTGTCCGTGTTGTGTCA	E11	NM_213963
<b>RXRG</b>	Retinoic acid receptor RXR-Gamma	AACCAAAGACGGAATCCTATGG	E5	GTTGGTGACAGGGTCATTCGT	E6	NM_001130213
<b>SCD</b>	Stearoyl-coA desaturase	CCACTGTGCCACTGACTTGCT	E6	CCCATTTTAACAGAAGGAAAAGTGA	E6	NM_213781
<b>TBC1D1</b>	TBC1 domain family member 1	GCAGCTTACGCAAACAGAACCT	E19	AGGCTCTGGATCCTCCCATT	E20	AK237784
<b>VEGFA</b>	Vascular endothelial growth factor A precursor	GTGCCCACTGAGGAGTTCAAC	E3	TCCTATGTGCTGGCCTTGGT	E4	NM_214084
<b>HPRT</b>	Hypoxanthine phosphoribosyltransferase 1	AAGATGGTCAAGGTTGCAAGCT	E6	ATTTCAAATCCAACAAAGTCTGGTCTA	E7	NM_001032376
		HPRT_Taqman probe: JOE-TGGTGAAAAGGACCCCTCGAAGTGTG-TAMRA			E6/E7	
<b>RPL32</b>	Ribosomal protein L32	CACCAGTCAGACCGATATGTCAA	E1	CGCACCCCTGTTGTCAATGC	E2	NM_001001636
		PRL32_Taqman probe: Cy5-TAAGCGGAACTGGCGGAAACCCA-BHQ			E1/E2	