

Table S1a. TaqMan Primer-Probe Sets - Inguinal Adipose Tissue

| Gene Symbol | Gene Name | Assay ID |
|----------------|--|---------------|
| <i>Acacb</i> | Acetyl-Coenzyme A carboxylase beta | Rn00588290_m1 |
| <i>Acly</i> | ATP citrate lyase | Rn00566411_m1 |
| <i>Aco2</i> | Aconitase 2, mitochondrial | Rn00577876_m1 |
| <i>Aldoc</i> | Aldolase C, Fructose-bisphosphate | Rn00560693_m1 |
| <i>Aqp7</i> | Aquaporin | Rn00569727_m1 |
| <i>Ccr5</i> | Chemokine (C-C motif) receptor 5 | Rn00588629_m1 |
| <i>Dusp18</i> | Dual specificity phosphatase 18 | Rn01443563_s1 |
| <i>Dusp4</i> | Dual specificity phosphatase 4 | Rn00573501_m1 |
| <i>Fads1</i> | Fatty acid desaturase 1 | Rn00584915_m1 |
| <i>Fads2</i> | Fatty acid desaturase 2 | Rn00580220_m1 |
| <i>Fam129</i> | Family with sequence similarity 129, member A | Rn00573778_m1 |
| <i>Fgf21</i> | Fibroblast growth factor 21 | Rn00590706_m1 |
| <i>Gpr81</i> | G protein-coupled receptor 81 | Rn03037047-sH |
| <i>Hmgcs2</i> | 3-Hydroxy-3-methylglutaryl-Coenzyme A synthase 2 (mitochondrial) | Rn00597339_m1 |
| <i>Insig1</i> | Insulin induced gene 1 | Rn00574380_m1 |
| <i>Lbp</i> | Lipopolysaccharide binding protein | Rn00567985_m1 |
| <i>Ldha</i> | Lactate dehydrogenase A | Rn00820751_g1 |
| <i>Lonp1</i> | Lon peptidase1, mitochondrial | Rn00591446_m1 |
| <i>Lpin1</i> | Lipin 1 | Rn01469026_m1 |
| <i>Mif</i> | Macrophage inhibitory factor | Rn00821234_g1 |
| <i>Pc</i> | Pyruvate carboxylase | Rn00562634_m1 |
| <i>Pck1</i> | Phosphoenolpyruvate carboxykinase 1 (soluble) | Rn01529014_m1 |
| <i>Pck2</i> | Phosphoenolpyruvate carboxykinase 2 (mitochondrial) | Rn03648110_m1 |
| <i>Pde3b</i> | Phosphodiesterase 3B, cGMP-inhibited | Rn00568191_m1 |
| <i>Pfkfb3</i> | 6-Phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 | Rn00589179_m1 |
| <i>Pik3r3</i> | Phosphoinositide-3-kinase. Regulatory subunit 3 (gamma) | Rn00573586_m1 |
| <i>Retn</i> | Resistin | Rn00595224_m1 |
| <i>Slc36a2</i> | Solute carrier family 36 (proton/amino acid symporter), member 2 | Rn00595142_m1 |
| <i>Stat5a</i> | Signal transducer and activator of transcription 5A | Rn00567011_m1 |
| <i>Tgfb3</i> | Transforming growth factor, beta 3 | Rn00565937_m1 |
| <i>Tshr</i> | Thyroid stimulating hormone receptor | Rn00563612_m1 |
| <i>Tnfrs21</i> | Tumor necrosis factor receptor superfamily, member 21 | Rn01757170_m1 |

Table S1b. TaqMan Primer-Probe Sets – Liver

| Gene Symbol | Gene Name | Assay ID |
|----------------|--|----------------|
| <i>Agpat9</i> | 1-Acylglycerol-3-phosphate O-acyltransferase 9 | Rn01450155_m1 |
| <i>Aqp8</i> | Aquaporin 8 | Rn00569732_m1 |
| <i>Asus</i> | Asparagine synthetase | Rn00565180_m1 |
| <i>Atf3</i> | Activating transcription factor 3 | Rn00563784_m1 |
| <i>Atf4</i> | Activating transcription factor 4 (tax-responsive enhancer element B67) | Rn00824644_g1 |
| <i>Atf6</i> | Activating transcription factor 6 | Rn01490854_m1 |
| <i>Bhmt</i> | Betaine-homocysteine methyltransferase | Rn00578255_m1 |
| <i>Cbs</i> | Cystathionine beta synthase | Rn00560948_m1 |
| <i>CD36</i> | CD36 molecule (thrombospondin receptor) | Rn01442639_m1 |
| <i>Cebpb</i> | CCAAT/enhancer binding protein (C/EBP), beta | Rn00824635_s1 |
| <i>Crot</i> | Carnitine O-octanoyltransferase | Rn00583174_m1 |
| <i>Ctps</i> | CTP synthase | Rn00516751_m1 |
| <i>Cxcl12</i> | Chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1) | Rn00573260_m1 |
| <i>Cyp17a1</i> | Cytochrome P450, family 17, subfamily a, polypeptide 1 | Rn00562601_m1 |
| <i>Dut</i> | Deoxyuridine triphosphatase | Rn00585902_m1 |
| <i>Eif2ak3</i> | Eukaryotic translation initiation factor 2 α kinase 3 | Rn00581002_m1 |
| <i>Eif2ak4</i> | Eukaryotic translation initiation factor 2 α kinase 4 | Rn01484206_m1 |
| <i>Eif2s1</i> | Eukaryotic translation initiation factor 2, subunit 1 alpha | Rn00820979_g1 |
| <i>Elovl2</i> | Elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 2 | Rn01450663_m1 |
| <i>Elovl5</i> | ELOVL family member 5, elongation of long chain fatty acids (yeast) | Rn01446631_m1 |
| <i>Fgf1</i> | Fibroblast growth factor 1 | Rn00563362_m1 |
| <i>Fzd4</i> | Frizzled homolog 4 (Drosophila) | Rn00433382_m1 |
| <i>Gadd45a</i> | Growth arrest and DNA-damage-inducible, alpha | Rn00577049_m1 |
| <i>Gas5</i> | Growth arrest specific 5 | Rn01497988_g1 |
| <i>Gck</i> | Glucokinase | Rn00561265_m1 |
| <i>Gclm</i> | Glutamate cysteine ligase, modifier subunit | Rn00568900_m1 |
| <i>Gldc</i> | Glycine dehydrogenase (decarboxylating) | Rn015017661_m1 |
| <i>Gss</i> | Glutathione synthetase | Rn00564188_m1 |
| <i>Gsta3</i> | Glutathione S-transferase A3 | Rn04223027_m1 |
| <i>Gstm2</i> | Glutathione S-transferase mu 2 | Rn00598597_m1 |
| <i>Gstm3</i> | Glutathione S-transferase mu 3 | Rn01789233_m1 |
| <i>Hadhb</i> | Hydroxyacyl-Coenzyme A dehydrogenase/3-Ketoacyl-Coenzyme A thiolase/Enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit | Rn00592435_m1 |
| <i>Igfals</i> | Insulin-like growth factor binding protein, acid labile subunit | Rn02132937_s1 |
| <i>Igfbp1</i> | Insulin-like growth factor binding protein 1 | Rn00565713_m1 |
| <i>Lars</i> | Leucyl-tRNA synthetase | Rn01406626_m1 |
| <i>Lipc</i> | Lipase, hepatic | Rn00561474_m1 |

| | | |
|-----------------|---|---------------|
| <i>Mat1a</i> | Methionine adenosyltransferase I, alpha | Rn00563454_m1 |
| <i>Mcee</i> | Methylmalonyl CoA epimerase | Rn01478033_m1 |
| <i>Me1</i> | Malic enzyme 1, NADP(+)-dependent, cytosolic | Rn00561502_m1 |
| <i>Mthfd1</i> | Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, Methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase | Rn00574600_m1 |
| <i>Mthfd2</i> | Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, Methenyltetrahydrofolate cyclohydrolase | Rn01425878_g1 |
| <i>Mthfr</i> | Methylenetetrahydrofolate reductase (NAD(P)H) | Rn01515583_m1 |
| <i>Mtr</i> | 5-Methyltetrahydrofolate-homocysteine methyltransferase | Rn00578368_m1 |
| <i>Mybbp1a</i> | MYB binding protein (P160) 1a | Rn00581478_m1 |
| <i>Nox4</i> | NADPH oxidase 4 | Rn00585380_m1 |
| <i>Odc1</i> | Ornithine decarboxylase 1 | Rn01469808_g1 |
| <i>Pbsn</i> | Probasin | Rn00569425_m1 |
| <i>Pck1</i> | Phosphoenolpyruvate carboxykinase 1 (soluble) | Rn01529014_m1 |
| <i>Pck2</i> | Phosphoenolpyruvate carboxykinase 2 (mitochondrial) | Rn03648110_m1 |
| <i>Phgdh</i> | Phosphoglycerate dehydrogenase | Rn00821347_g1 |
| <i>Pik3c3</i> | Phosphoinositide-3-kinase, class3 | Rn00576314_m1 |
| <i>Pklr</i> | Pyruvate kinase, liver and RBC | Rn01455286_m1 |
| <i>Pnpla3</i> | Patatin-like phospholipase domain containing 3 | Rn01502361_m1 |
| <i>Ppp1r3b</i> | Protein phosphatase 1, regulatory (inhibitor) subunit 3B | Rn01482776_s1 |
| <i>Slc16a10</i> | Solute carrier family 16 (monocarboxylic acid transporters), member 10 | Rn00593684_m1 |
| <i>Slc25a21</i> | Solute carrier family 25 (mitochondrial oxodicarboxylate carrier), member 21 | Rn00592418_m1 |
| <i>Slc38a2</i> | Solute carrier family 38, member 2 | Rn00710421_m1 |
| <i>Slc6a6</i> | Solute carrier family 6 (neurotransmitter transporter, taurine), member 6 | Rn00567962_m1 |
| <i>Slc7a1</i> | Solute carrier family 7 (cationic amino-acid transporter, y+system), member 1 | Rn00565399_m1 |
| <i>Srm</i> | Spermine synthase | Rn00821456_g1 |
| <i>Tat</i> | Tyrosine aminotransferase | Rn01431532_m1 |
| <i>Tnfrsf21</i> | Tumor necrosis factor receptor superfamily, member 21 | Rn01757170_m1 |
| <i>Trib3</i> | Tribbles homolog 3 (Drosophila) | Rn00595314_m1 |
| <i>Umps</i> | Uridine monophosphate synthetase | Rn01475102_m1 |
| <i>Vldlr</i> | Very low density lipoprotein receptor | Rn01498163_m1 |