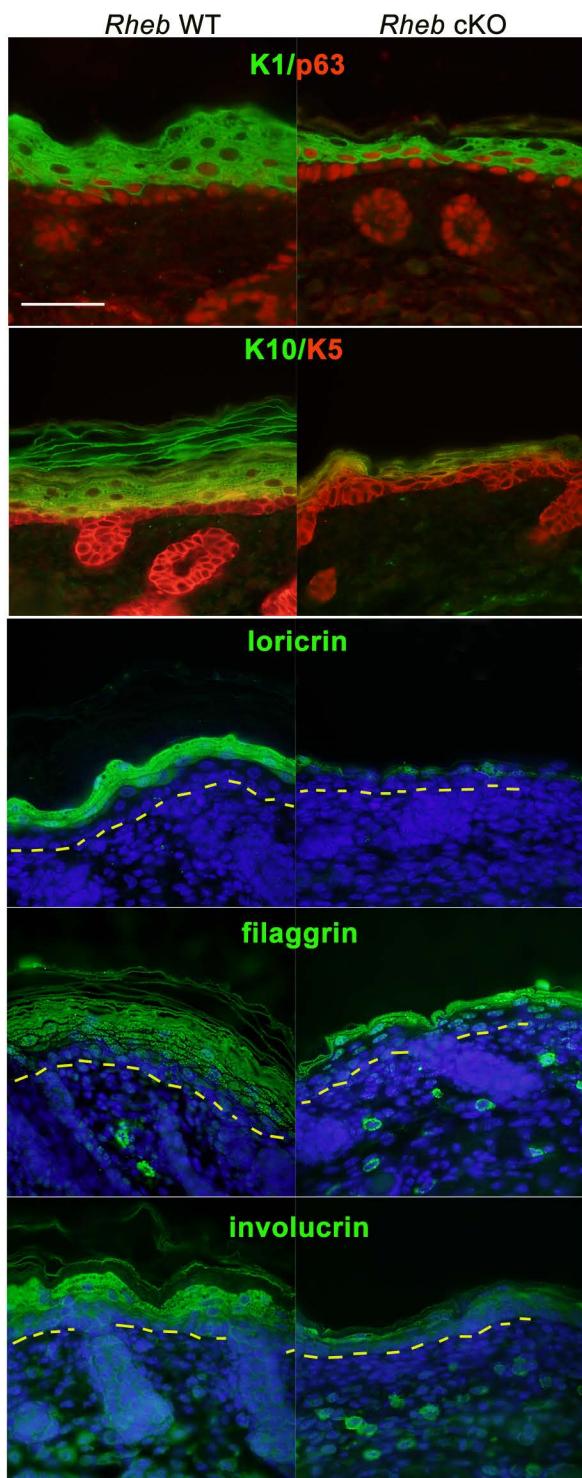
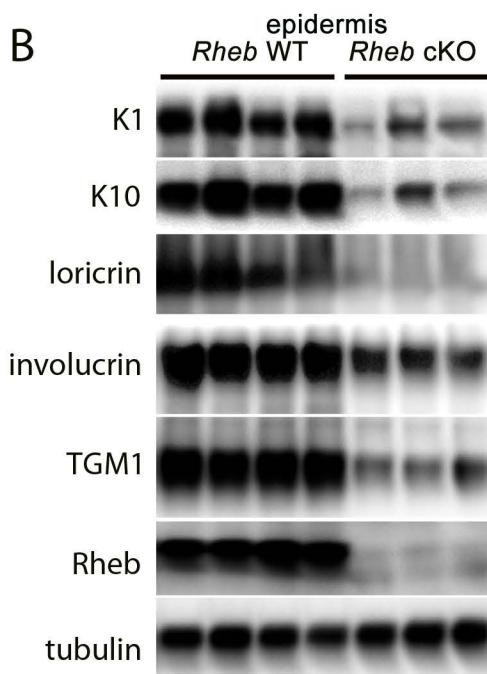


# Supplementary Figure S1

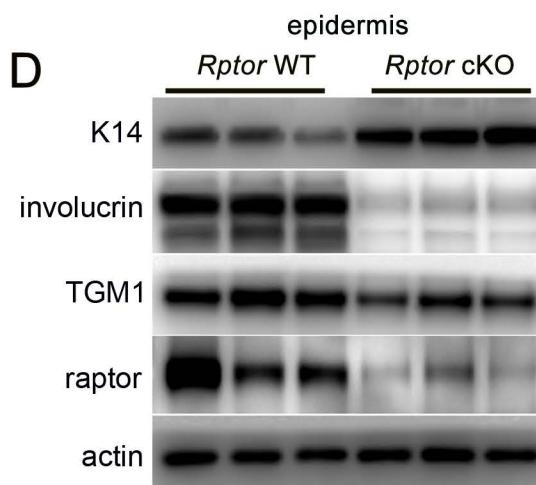
A



B



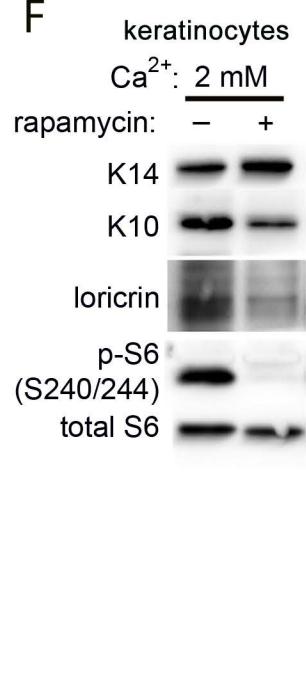
D



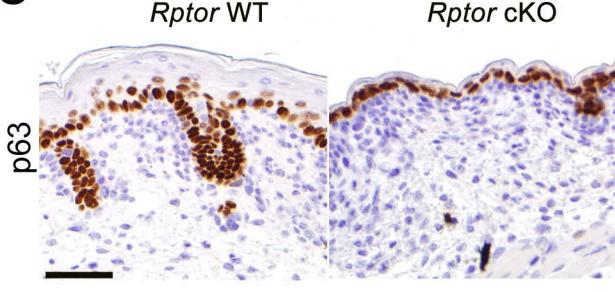
E

	$\text{Ca}^{2+}$ :	
	0 mM	2 mM
<i>Rhee:</i>	WT	cKO
K5	[band]	[band]

F



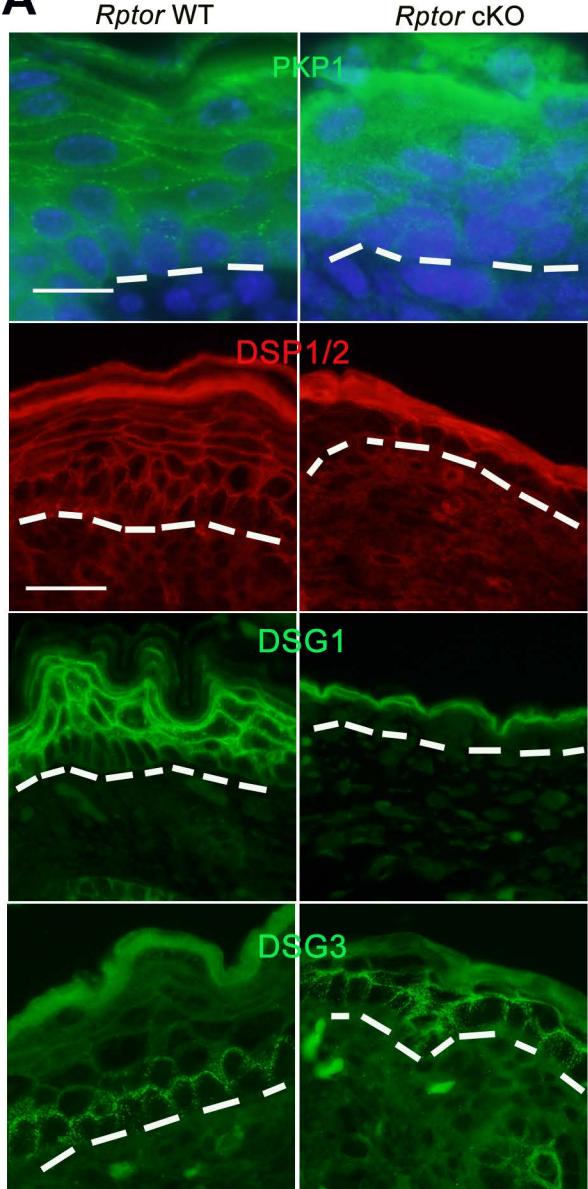
C



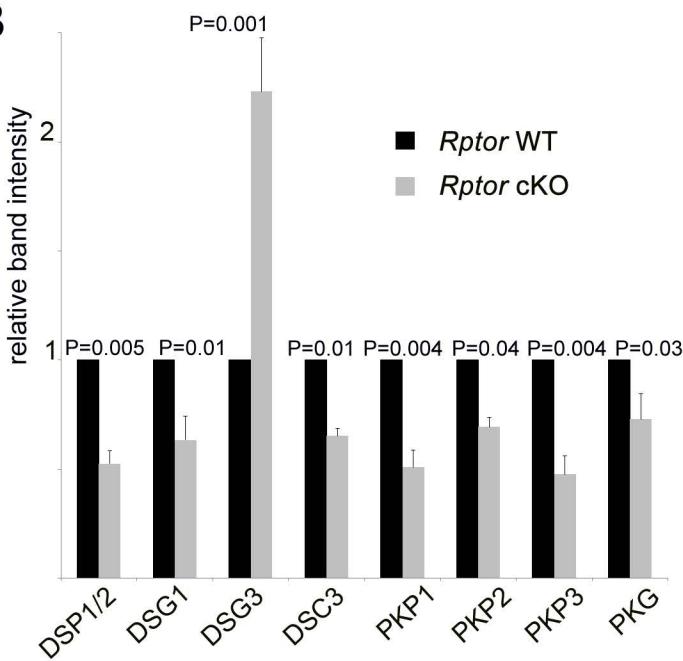
**Supplementary Figure S1: Epidermal-specific mTORC1 loss-of-function models show impaired epidermal differentiation.** **(A)** *Rheb* cKO P0 epidermis fails to express spinous (Keratin 1, 10) and granular layer (loricrin, filaggrin, involucrin) differentiation markers by immunofluorescence, while the basal layer is maintained or even slightly thicker than WT (p63 and Keratin 5). Scale bar= 30  $\mu$ m. **(B)** *Rheb* cKO P0 epidermal protein lysates subjected to immunoblotting confirm downregulation of K1, K10, loricrin, involucrin and transglutaminase (TGM1) 1 expression compared to WT. **(C)** *Rptor* cKO P0 epidermis shows a similar but more severe phenotype compared to *Rheb* cKO, with near complete loss of suprabasal keratinocyte layers in the epidermis as demonstrated by basal marker p63 immunostaining. Scale bar= 30  $\mu$ m. **(D)** Immunoblotting of *Rptor* cKO vs WT P0 epidermal protein lysates confirms relative downregulation of granular markers involucrin and TGM1 with slight up-regulation of basal marker keratin 14 (K14). **(E)** Calcium-induced differentiation is impaired in *Rheb* cKO cells subjected to calcium switch assay (transfer from 0.05 mM to 2 mM calcium concentration media). While WT cells up-regulate differentiation markers (K10, loricrin, filaggrin, involucrin and TGM1) in response to exposure to 2 mM calcium for 24 hours, cKO keratinocytes show an impaired response. Basal markers (K5) are unchanged in response to calcium. **(F)** mTORC1 inhibition by rapamycin (200 nM) in WT keratinocytes impairs expression of spinous (K10) and granular (loricrin) differentiation markers in 2 mM calcium. Phosphorylated S6 protein (p-S6) is markedly diminished by rapamycin, confirming mTORC1 inhibition.

# Supplementary Figure S2

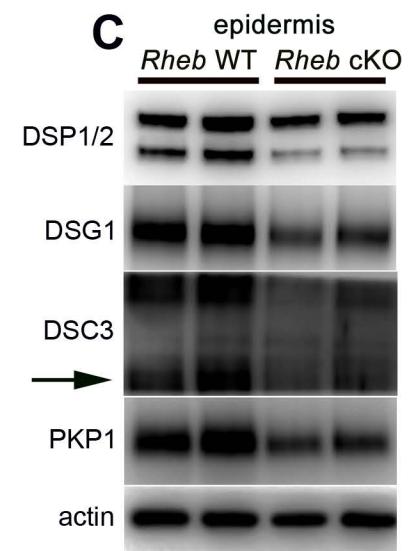
**A**



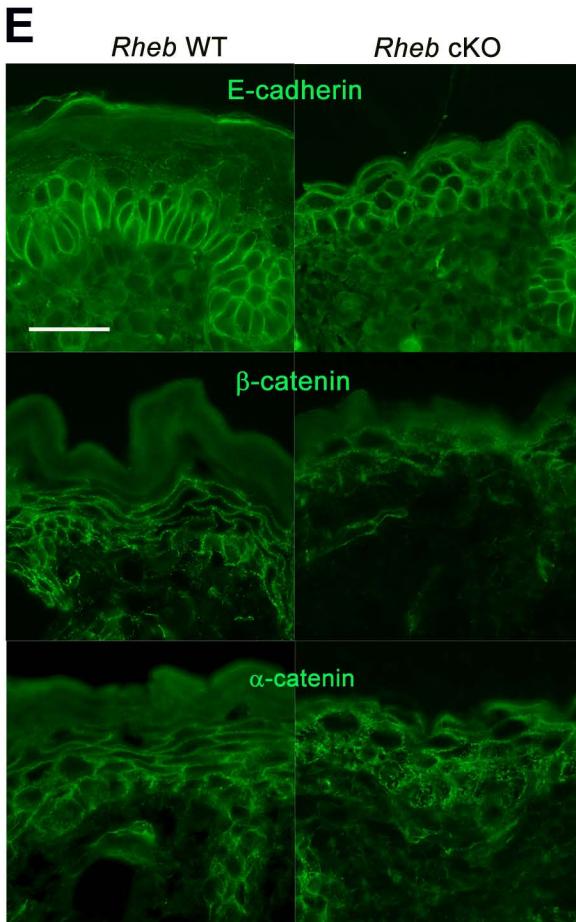
**B**



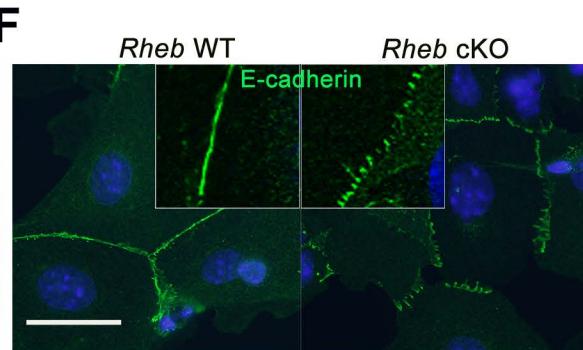
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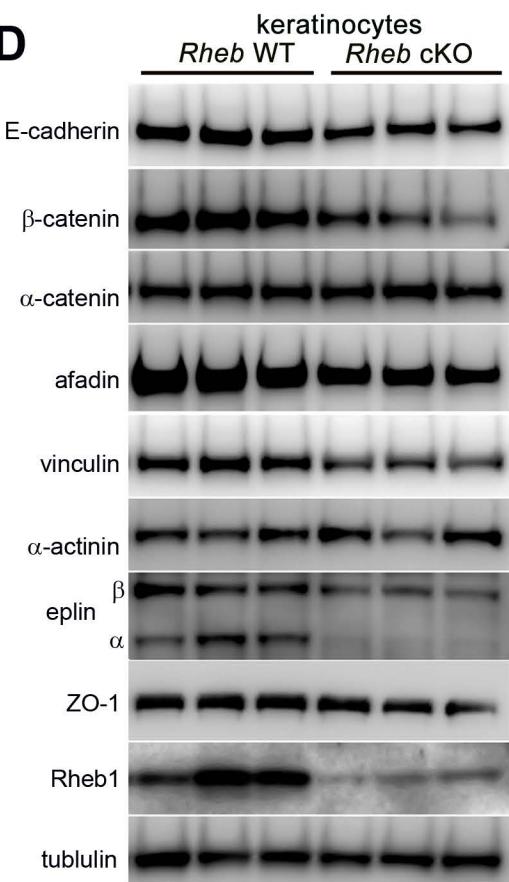
**E**



**F**

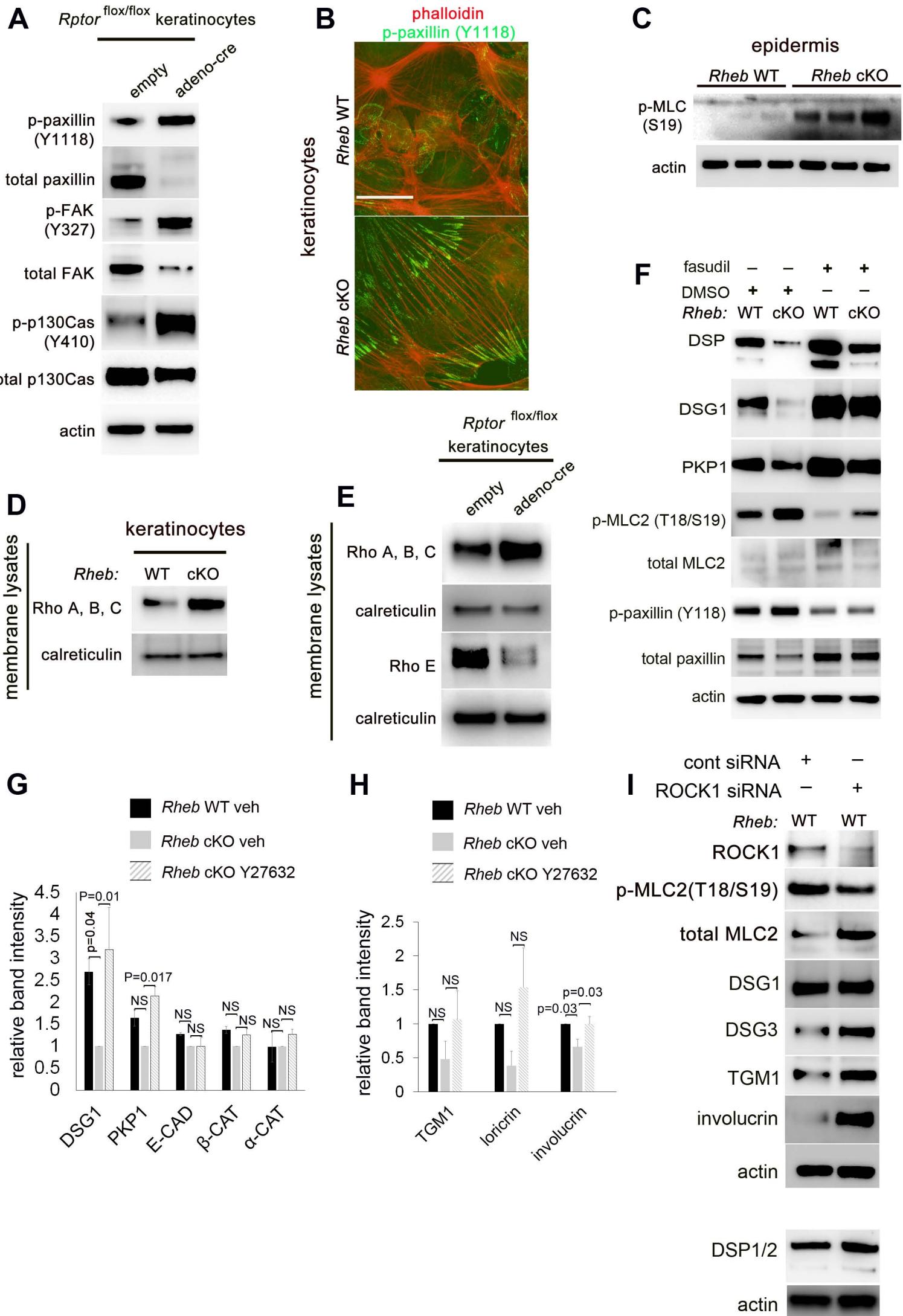


**D**



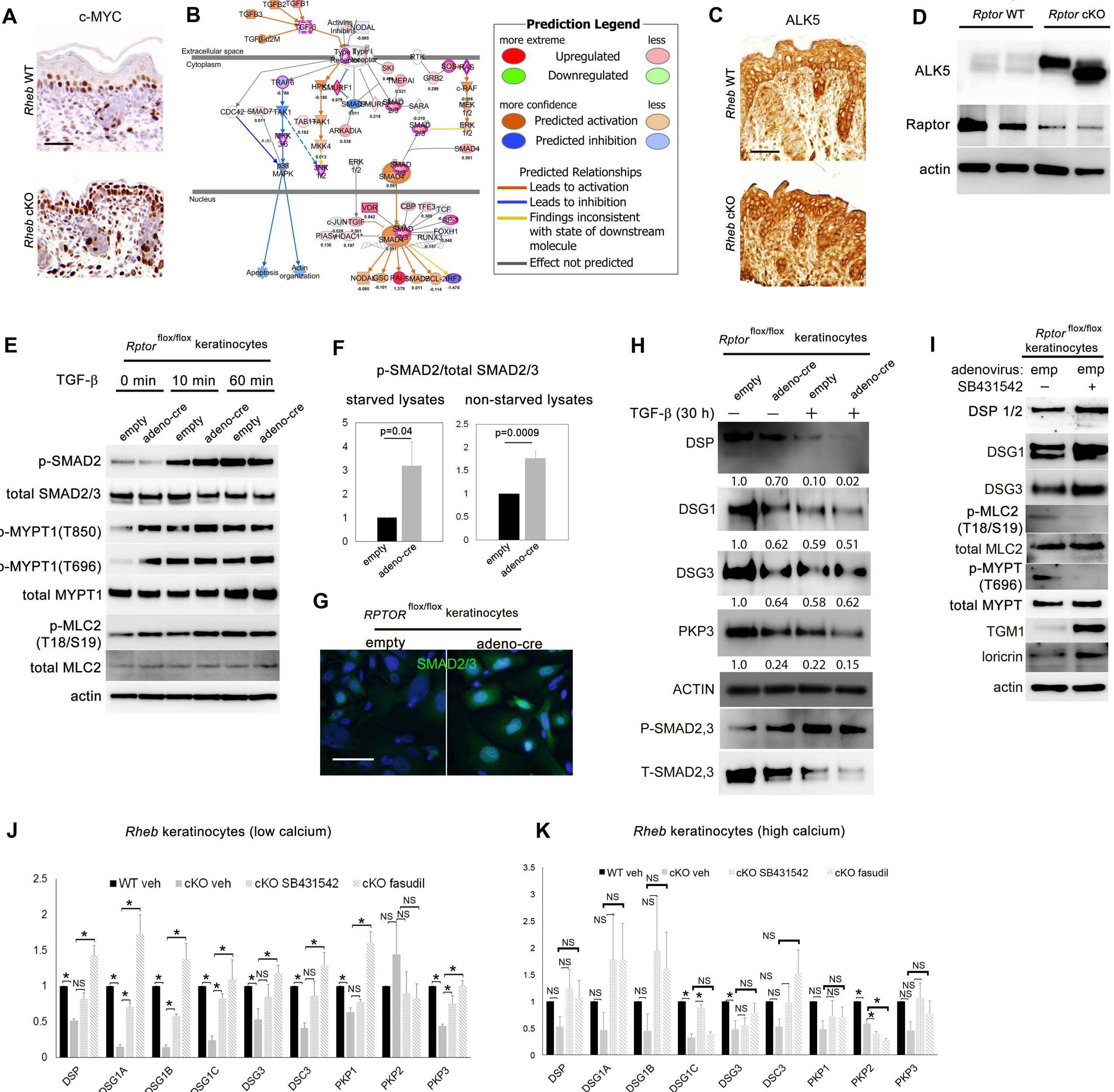
**Supplementary Figure S2: mTORC1 loss-of-function is associated with decreased desmosomal, but not adherens, junctions.** **(A)** Decreased expression of PKP1 (punctate dots), DSP1/2, DSG1 and DSG3 in *Rptor* cKO compared to WT P0 epidermis by immunofluorescence. Scale bar= 60 µm. **(B)** Densitometry quantification of immunoblot analysis shown in main Figure 3G (n=3; error bars represent SEM; p values indicated are by Student's T-test). **(C)** *Rheb* cKO P0 epidermal protein lysates subjected to immunoblotting confirm lower total levels of desmosomal proteins (DSP1/2, DSG1, DSC3 and PKP1). **(D)** *Rheb* cKO P0 cultured keratinocytes show normal protein expression of adherens junction components (E-cadherin, β-catenin, α-catenin), as well as adherens junctions components (afadin) and tight junction components (ZO-1) by immunoblotting. Some actin-binding proteins such as vinculin, afadin and EPLIN show decreased levels in cKO epidermis as well. **(E)** *Rheb* cKO P0 epidermis shows normal expression of adherens junction proteins by immunofluorescence. Scale bar = 30 µm. **(F)** *Rheb* cKO keratinocytes have normal membranous levels of E-cadherin, however the distribution of staining demonstrates immature adhesion zippers rather than mature adhesion bands by immunofluorescence. Scale bar = 50 µm.

# Supplementary Figure S3



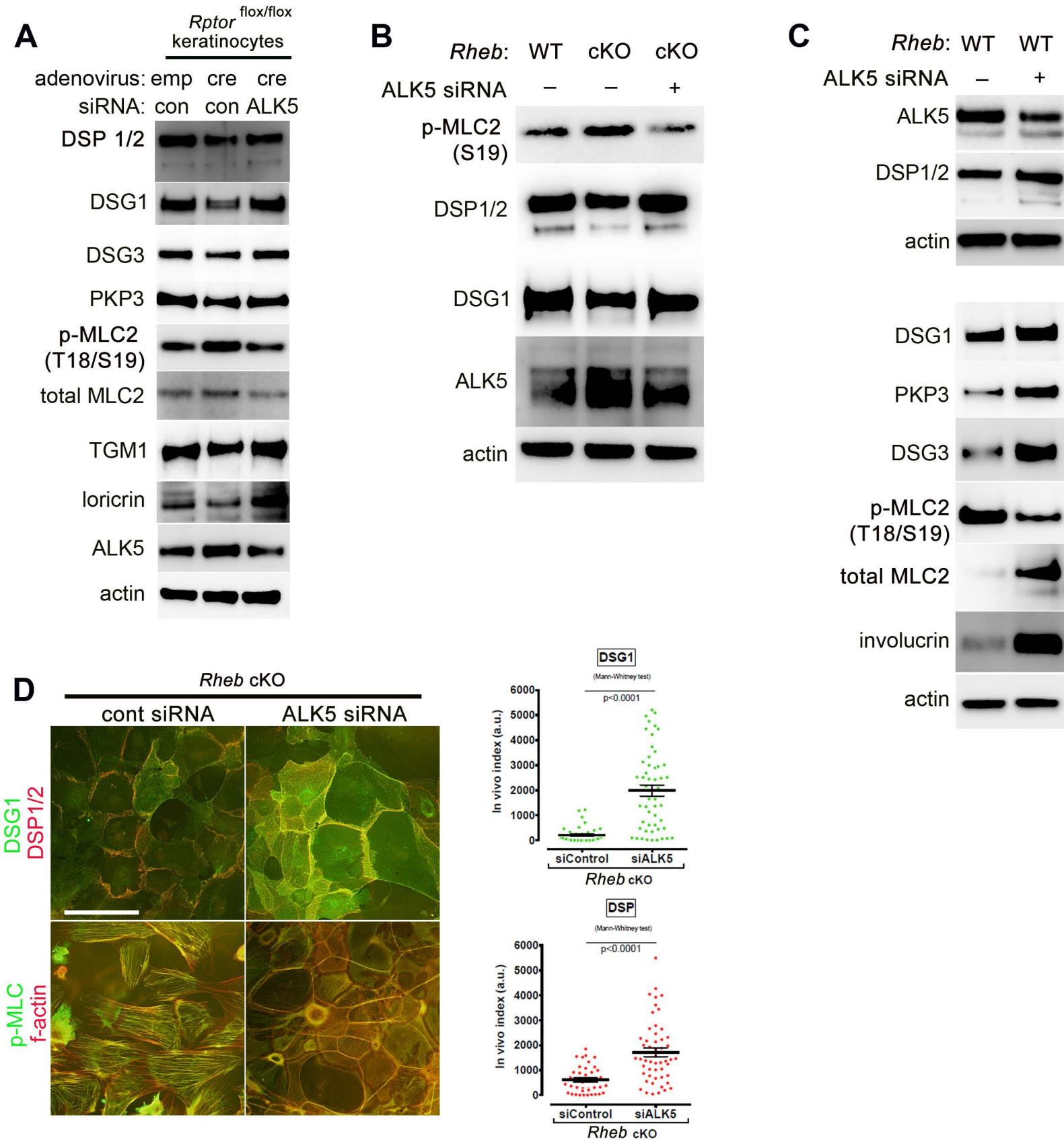
**Supplementary Figure S3: mTORC1 loss-of-function is associated with increased Rho kinase activity and focal adhesion formation.** (A) Increased biochemical evidence of focal adhesion formation in inducible *Rptor* KO keratinocytes, including increased phosphorylated paxillin (p-paxillin), focal adhesion kinase (p-FAK) and p130Cas (p-p130Cas), following calcium switch. (B) Immunofluorescence for p-paxillin and phalloidin staining for f-actin demonstrates relatively rare focal adhesions in WT cells compared to *Rheb* cKO cells where focal adhesion and actin stress fiber formation is abundant. Scale bar = 30  $\mu$ m. (C) Increased phosphorylated myosin light chain (p-MLC2) in *Rheb* cKO P0 epidermal lysates by immunoblotting compared to WT control. (D), (E) Lysates enriched for membrane proteins from *Rheb* cKO and *Rptor* inducible KO cultured keratinocytes demonstrate increased Rho A/B/C protein at the membrane in cells with mTORC1 loss-of-function compared to WT cells, consistent with increased Rho activity. Levels of ROCK inhibitor Rho E, by contrast, are decreased in membrane lysates from *Rptor* KO keratinocytes. Rho A/B/C and calreticulin in (D) were immunoblotted in parallel, contemporaneously. (F) Immunoblotting for desmosomal components (DSP1/2, DSG1, PKP1) in WT and *Rheb* cKO cells demonstrates rescue of total levels of desmosomal proteins with ROCK inhibition using fasudil (50  $\mu$ M). ROCK activity suppression is documented by decreased p-MLC2 levels. Focal adhesion marker protein p-paxillin is also upregulated in *Rheb* cKO keratinocytes and is sensitive to ROCK inhibition. DSP, PKP1 and total MLC2 were immunoblotted in parallel, contemporaneously with the other markers. (G) Densitometry quantification of immunoblot experiments from **Figure 6C** (r=3; p-values by one-way ANOVA). (H) Densitometry quantification of immunoblot experiments from **Figure 6E** (r=3; p-values by one-way ANOVA). (I) Immunoblotting of *Rheb* WT cells treated with ROCK1 siRNA (50nm) for ROCK1 and markers of ROCK activity, desmosomal and biochemical differentiation markers. DSP (lower panel) was immunoblotted separately from the upper panel using the same biological replicate. Error bars represent SEM throughout.

# Supplementary Figure S4



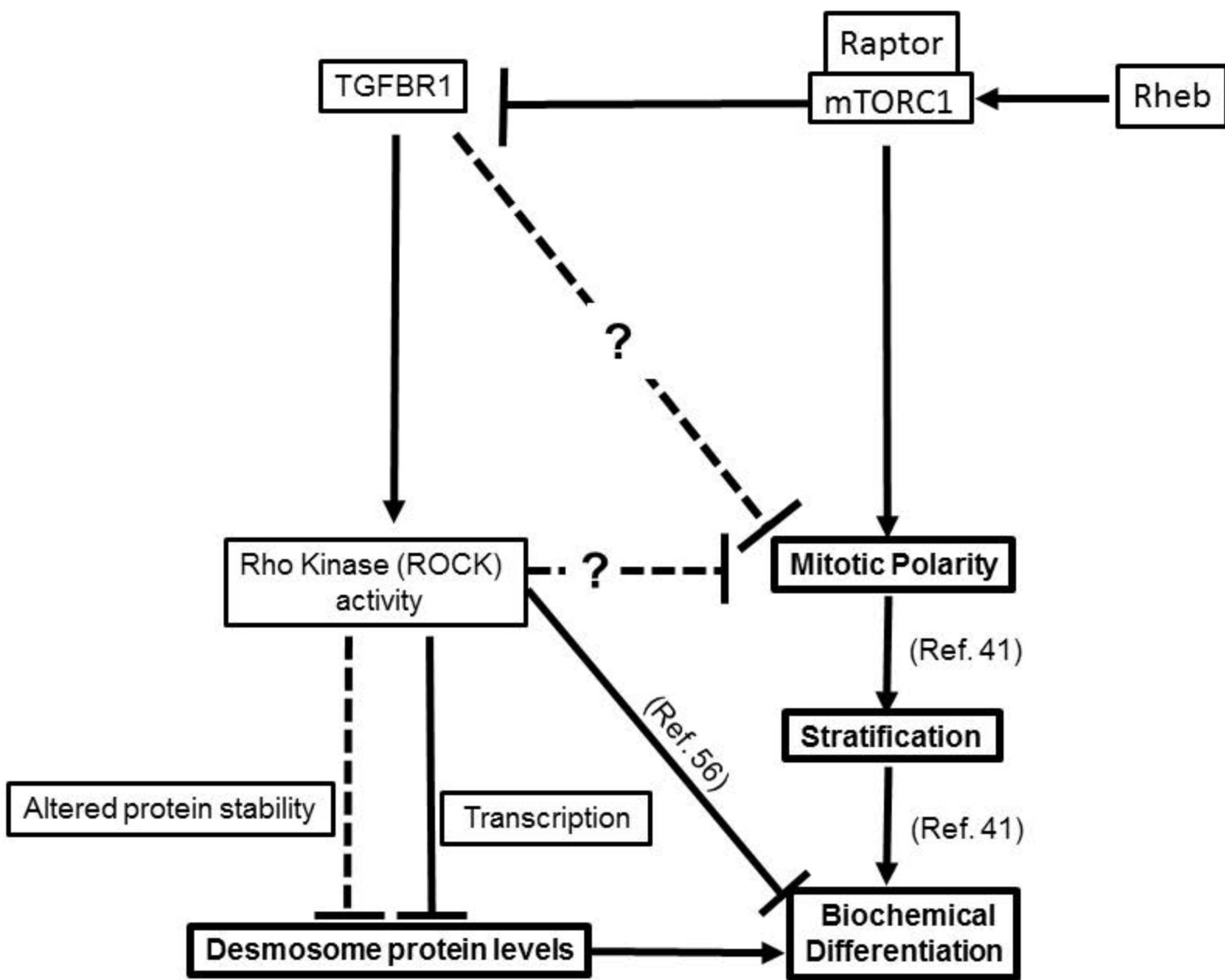
**Supplementary Figure S4: ALK5 levels and TGF- $\beta$  signaling are increased following mTORC1 loss-of-function and TGF- $\beta$  signaling is necessary and sufficient to decrease desmosome levels in keratinocytes.** (A) Immunohistochemistry for c-MYC shows more diffuse expression in *Rheb* cKO epidermis compared to WT where it is expressed predominantly in basal cells (scale bar=30  $\mu$ m). (B) Ingenuity Pathway Analysis of the TGF-  $\beta$  signaling pathway from differential gene expression analysis of *Rheb* WT vs. cKO E18.5 epidermis. Genes within our data set whose expression showed greater than 2SD differential fold change are outlined in magenta and depicted in red (signifying up-regulation) or blue (signifying down-regulation). (C) Membranous ALK5 (TGF- $\beta$  receptor I) levels are increased in *Rheb* cKO P0 epidermis compared to WT controls by immunohistochemistry (scale bar=30  $\mu$ m). (D) ALK5 levels are increased by immunoblotting in *Rptor* cKO P0 epidermis compared to WT control. (E) Short-term treatment of *Rptor*<sup>flox/flox</sup> keratinocyte cultures treated with empty adenovirus or adenoviral-cre demonstrates increased TGF- $\beta$  signaling (increased p-SMAD2 levels) and increased ROCK activation by immunoblotting (increased levels of p-MYPT1 and p-MLC2) in cells with mTORC1 inactivation with TGF- $\beta$  treatment. ROCK activation is also increased in WT cells in response to TGF- $\beta$ . (F) Densitometry analysis of phospho/total SMAD2, 3 expression in western blots from starved and non-starved *Rptor*<sup>flox/flox</sup> and inducible *Rptor* cKO keratinocytes demonstrates significant up-regulation in *Rptor* cKO keratinocytes ( $n=4$ ; error bars represent SEM;  $p$  values indicated are by Student's T-test). (G) Immunofluorescence for SMAD2, 3 demonstrates increased nuclear localization in *Rptor*<sup>flox/flox</sup> keratinocyte cultures treated with adenoviral-cre (scale bar=50  $\mu$ m). (H) Long term (30 h) TGF- $\beta$  treatment of *Rptor*<sup>flox/flox</sup> keratinocyte cultures treated with empty adenovirus or adenoviral-cre increases p-SMAD2, 3 levels and suppresses DSP1/2, DSG1, DSG3 and PKP3 levels by immunoblotting. (I) By immunoblotting, basal p-MLC2 and p-MYPT1 levels are decreased, and desmosome proteins (DSP1/2, DSG1, DSG3) and differentiation markers (TGM1, loricrin) are increased in *Rptor*<sup>flox/flox</sup> keratinocyte cultures with empty vector, treated with ALK5 inhibitor SB431542. *Rheb* cKO keratinocytes show uniform down-regulation of desmosomal mRNA levels under low calcium (J) conditions as well as high calcium (K) conditions. ROCK inhibition with fasudil or ALK5 inhibition with SB431542 is sufficient to rescue desmosomal mRNA levels to WT levels for most of the desmosomal transcripts ( $n=3$ ; error bars represent SEM; \* indicates  $p < 0.05$  by one-way ANOVA).

# Supplementary Figure S5



**Supplementary Figure S5: siRNA mediated depletion of ALK5 is sufficient to inhibit ROCK signaling and rescue desmosome levels in keratinocytes with mTORC1 loss-of-function.** **(A)** Treatment of Inducible *Rptor* cKO keratinocytes with ALK5 siRNA partially suppresses p-MLC2 and ALK5 levels and rescues expression of desmosomal proteins (DSP, DSG1, DSG3, PKP3) and markers of biochemical differentiation (TGM1, loricrin) by immunoblotting. **(B)** Treatment of *Rheb* cKO keratinocytes with ALK5 siRNA partially suppresses p-MLC2 and ALK5 levels and rescues desmosomal protein expression by immunoblotting. **(C)** Treatment of *Rheb* WT keratinocytes with ALK5 siRNA partially suppresses p-MLC2 and ALK5 levels and rescues expression of desmosomal proteins (DSP, DSG1, DSG3, PKP3) and markers of biochemical differentiation (involucrin) by immunoblotting. DSP and ALK5 were immunoblotted separately using the same biological replicate. **(D)** Treatment of *Rheb* cKO keratinocytes with ALK5 siRNA increases membranous desmosomal protein levels (DSP1/2 and DSG1) and cortical f-actin (by phalloidin staining) and p-MLC2 levels by immunofluorescence (left panels) (scale bar=100  $\mu$ m). Quantification of DSP and DSG1 border fluorescence (right panels) from representative images (n>28 cells, r=3; p<0.001 by Mann-Whitney test).

# Supplementary Figure S6



**Supplementary Figure S6: Tentative model outlining the downstream sequalae of mTORC1 loss-of-function in the epidermis.** Solid lines represent pathways substantiated in this manuscript, or by previous studies (references 41,56). Dashed lines represent potential uncharacterized consequences of mTORC1 inhibition that are the subject of future study.

## **Methods:**

### **Mice genotyping:**

- Wild-type and floxed *Rptor*: 5'-CTC AGT AGT GGT ATG TGC TCA G-3' (forward)  
5'-GGG TAC AGT ATG TCA GCA CAG-3' (reverse)
- Wild-type and floxed *Rheb*: 5'-GCC CAG AAC ATC TGT TCC AT-3' (forward)  
5'-GGT ACC CAC AAC CTG ACA CC-3' (reverse)
- Recombined *Rheb*: 5'-ATA GCT GGA GCC ACC AAC AC-3' (forward)  
5'-GCC TCA GCT TCT CAA GCA AC-3' (reverse)
- KRT14-cre: 5'- TTC CTC AGG AGT GTC TTC GC-3' (transgene)  
5'-GTC CAT GTC CTT CCT GA GC-3' (transgene)  
5'-CAA ATG TTG CTT GTC TGG TG-3' (internal positive control forward)  
5'-GTC AGT CGA GTG CAC AGT TT-3' (internal positive control reverse)

### **Barrier function assay:**

Embryos were euthanized, washed in ice-cold PBS, passaged through a gradient of ice-cold methanol and stained in 0.1% toluidine blue solution in water for 1-2 min on ice. After de-staining in PBS, embryos were photographed using a Motic SMZ 168 stereomicroscope (Motic Optics; Richmond, British Columbia) equipped with a Moticam 2300, 3.0 Megapixel digital color camera.

**Primary mouse keratinocyte cultures:** Newborn pups were decapitated, immersed in 7.5% povidone-iodine for 5 minutes and rinsed in 70% ethanol for 2 minutes. The trunk skin was removed and placed dermis-side down in a Petri dish containing 0.25% trypsin-EDTA (Invitrogen), overnight at 4 °C for 18h. The dermis was separated from the epidermis and keratinocytes isolated by scraping the basal surface of the epidermis. Keratinocyte cell suspensions were passed through a 100 micron cell strainer, centrifugated twice and plated on Petri dishes coated with fibronectin (F1141; Sigma), in calcium-free EMEM (BW06-174G; Lonza) supplemented with 10% chelated FBS (100-106; Gemini), 0.2 mM calcium (Lonza), 10 ng/ml epidermal growth factor (EGF)(Peprotech) and antibiotics. Chelation of Fetal Bovine Serum was carried out using

Chelex (100 resin, sodium, 200–400 dry mesh, 75–150 mm wet bead) (Bio-Rad) according to described protocols. The following day, media was replaced by EMEM containing 10% chelated FBS, EGF, 0.05 mM calcium and antibiotics.

**Reagents and antibodies:** Primary antibodies used were: Rheb (09-247, Millipore), 1:1000; Phospho-S6 Ribosomal Protein (Ser240/244) (5364, Cell Signaling), 1:800-1:1000; S6 Ribosomal Protein (2317, Cell Signaling), 1:1000; β-Actin (3700, Cell Signaling), 1:1000; Raptor (2280, Cell Signaling), 1:1000; Phospho-mTOR (S2448) (5536, Cell Signaling), 1:50; Phospho-4E-BP1 (Thr37/46) (2855, Cell Signaling), 1:1000; Phospho-Akt (S473) (4060, Cell Signaling), 1:1000; Phospho-Akt (T308) (5106, Cell Signaling), 1:500; Akt (pan) (4691, Cell Signaling), 1:1000; Phospho-FoxO1 (Thr24)/FoxO3a (Thr32)/FoxO4 (Thr28) (2599, Cell Signaling), 1:1000; FoxO1 (2880, Cell Signaling), 1:1000; Phospho-GSK-3β (Ser9) (9323, Cell Signaling), 1:1000; GSK-3β (sc-53931, Santa Cruz), 1:500; p63 (sc-8431, Santa Cruz), 1:50; Ki-67 (12202, Cell Signaling), 1:400; Phospho-Histone H3 (Ser10) (06-570, Millipore), 1:500-1:1000; Cleaved Caspase-3 (Asp175) (9664, Cell Signaling), 1:100; γ-tubulin (T-6557, Sigma-Aldrich), 1:5000; Acetyl-α-Tubulin (Lys40) (5335, Cell Signaling), 1:800; Survivin (2808, Cell Signaling), 1:400; Keratin1 (ab24643, Abcam), 1:1000; Keratin10 (PRB-159P, Covance), 1:1000; Keratin5 (PRB-160P, Covance), 1:1000; Keratin14 (CBL197, Millipore), 1:1000; Involucrin (PRB-140C, Covance), 1:1000; Loricrin (PRB-145P, Covance), 1:1000; Filaggrin (PRB-417P, Covance), 1:1000; TGM1 (ab103814, Abcam), 1:1000; β-Tubulin (2128, Cell signaling), 1:1000; DSP ( 10R-D108A, Fitzgerald), 1:500; DSG1 (sc-20114, Santa Cruz), 1:500; DSG3 (D218-3, MBL), 1:1000; DSC3 (sc-48750, Santa Cruz), 1:500; PKP1 (ab183512, Abcam), 1:1000; PKP2 (ab151402, Abcam), 1:1000; PKP3 (MA5-18080, ThermoFisher Scientific), 1:1000; E-Cadherin (3195, Cell Signaling); 1:1000; Pan-Cadherin (4068, Cell Signaling), 1:1000; β-Catenin (8480, Cell Signaling), 1:1000; α-E-Catenin Antibody (3236, Cell Signaling), 1:1000; γ-Catenin Antibody (2309, Cell Signaling) 1:1000; Vinculin (4650, Cell Signaling), 1:1000; Vinculin (V9264, Sigma-Aldrich), 1:50; α-Actinin (6487, Cell Signaling), 1:1000; EPLIN (sc-136399, Santa Cruz), 1:500; Afadin (13531, Cell Signaling), 1:1000; ZO-1 (13663, Cell

Signaling), 1:1000; Phospho-Myosin Light Chain 2 (Thr18/Ser19) (3674, Cell Signaling), 1:1000; Phospho-Myosin Light Chain 2 (Ser19) (3675, Cell Signaling), 1:1000; Myosin Light Chain 2 (8505, Cell Signaling), 1:500; Phospho-MYPT1 (Thr696) (5163, Cell Signaling), 1:1000; Phospho-MYPT1 (Thr853) (4563, Cell Signaling), 1:1000; MYPT1 (2634, Cell Signaling), 1:1000; Phospho-Paxillin (Tyr118) (2541, Cell Signaling), 1:50-1:1000; Paxillin (2542, Cell Signaling), 1:1000; Phospho-FAK (Tyr397) (3283, Cell Signaling), 1:1000; Fak (3285, Cell Signaling), 1:1000; Phospho-p130 Cas (Tyr410) (4011, Cell Signaling), 1:1000; p130 Cas (13846, Cell Signaling), 1:1000; ROCK1 (4035, Cell Signaling), 1:1000; ROCK2 (8236, Cell Signaling), 1:1000; RhoA (2117, Cell Signaling), 1:1000; RhoB (2098, Cell Signaling), 1:1000; Rho (A,B,C) (05-778, Millipore), 1:1000; RhoE/Rnd3 (05-723, Millipore), 1:1000; Calreticulin (12238, Cell Signaling), 1:1000; Na,K-ATPase (3010, Cell Signaling), 1:1000; ALK5 (ab31013, Abcam), 1:50-1:500; Smad2 (51-1300, ThermoFisher Scientific), 1:100; Smad3 (51-1500, ThermoFisher Scientific), 1:100; Phospho-Smad2 (Ser465/467) (3108, Cell Signaling), 1:1000; Phospho-Smad2 (Ser465/467)/Smad3 (Ser423/425), 1:1000; Smad2/3 (8685, Cell Signaling), 1:1000; Vimentin (5741, Cell Signaling), 1:1000.

**Histology and immunostaining:** Sections were deparaffinized in xylene (Sigma-Aldrich), hydrated in graded ethanol and rinsed in distilled water. Antigen retrieval was performed using citrate (10 mM, pH 6.0) or EDTA + 0.01% TWEEN 20 (1 mM, pH 8.0) buffers and HIER (heat-induced epitope retrieval) method, in accordance with the protocol specified for each antibody. All washing steps were done using 1X TBS-T buffer. Endogenous peroxidase activity was quenched by incubation with Dual Enzyme Block (Dako, Agilent Technologies) for 10 minutes at room temperature. Sections were incubated with each antibody overnight at 4°C diluted in antibody dilution buffer (Roche/Ventana Medical Systems). For immunohistochemistry, a horseradish peroxidase-labeled polymer, Poly-HRP PowerVision Detection System (Novocastra/Leica Biosystems) was applied for 30 minutes at room temperature. Signal detection was performed using 3,3'-diaminobenzidine tetrahydrochloride (DAB) (Sigma-Aldrich) for 20 minutes at room temperature. Slides were counterstained for 30 seconds with Mayer's hematoxylin (Dako, Agilent Technologies), dehydrated, and mounted. For

immunofluorescence, after primary antibody overnight reaction at 4°C, sections were incubated with secondary antibodies (Alexafluor-488 or Alexafluor-594 conjugated, anti-Rabbit or anti-Mouse IgG, Thermo Fisher Scientific) at a dilution of 1:200 for 1h 30min at room temperature. Subsequently they were washed 2x/5min in PBS, rinsed in distilled water, dehydrated in graded ethanol and mounted with ProLong Gold Antifade with DAPI (Thermo Fisher Scientific).

**Protein lysate preparation and immunoblotting:** Once dissociated, the epidermal sheet was homogenized using gentleMACS M tubes in the gentleMACS dissociator (Miltenyi Biotec). Tissues or cells were homogenized and lysed in ice-cold Urea lysis buffer (8M Urea, 60mM Tris pH 6.8, 1 % SDS [w/v],) supplemented with NaVO<sub>4</sub> (1 mM), NaF (1 mM) and 10 µl Halt Protease and Phosphatase Inhibitor Cocktail (78440, Thermo Fisher Scientific) in 1 ml buffer for 15 min on ice. Lysates were sheared by passing through 20,22,25 and 26 gauge needles progressively, centrifuged at 21,000 rpm for 10 minutes at 4°C and supernatants collected. Protein concentrations were quantified using the BCA Protein Assay Kit (23225, Pierce), and 5-10 ug of protein was resolved on a 1.5-mm, 3-8% Tris-Acetate or 4-12% Bis-Tris SDS-PAGE gel (Thermo Fisher Scientific). Protein was transferred to nitrocellulose membranes (Amersham Bioscience). Membranes were allowed to block for 1h at room temperature in 5% nonfat milk in 1X TBS-T and then incubated overnight with a primary antibody diluted in 5% BSA in 1X TBS-T. The secondary antibodies used were anti-rabbit or anti-mouse immunoglobulin as appropriate (Cell Signaling) and diluted at 1:1000 in 5% nonfat milk in 1X TBS-T . Blots were developed using a chemiluminescent development solution (Super Signal West Femto, Pierce) and bands were imaged on a chemiluminescent imaging system (ChemiDoc Touch imaging System, Bio-Rad) or MicroChemi Chemiluminescent imager (FroggaBio Inc.). Digital images were quantified using background correction on the Alpha Innotech system (Protein Simple) and all bands were normalized to their respective β-actin, tubulin or GAPDH expression levels as loading controls.

**RNA isolation and RT-PCR:** The following primers and probes were utilized: DSP(Mm01351876\_m1), DSG1a(Mm00809994\_s1), DSG1b(Mm00839130\_mH),

DSG1c(Mm00725121\_g1) DSG3(Mm00659652\_m1), DSC3(Mm00492270\_m1), PKP1(Mm00451023\_m1), PKP2(Mm00503159\_m1), PKP3( Mm00451123\_m1), actin (Mm02619580\_g1) (TaqMan Gene Expression Assay, Applied Biosystems).

**Immunocytochemistry:** Cells were permeabilized and blocked in buffer containing 1X PBS, 5% normal donkey serum and 0.3% Triton X-100. Coverslips were incubated with indicated primary antibodies overnight at 4°C in antibody dilution buffer (ADB) containing 1X PBS, 1% BSA and 0.3% Triton X-100. After 3 PBS washes, coverslips were incubated with secondary antibodies (Alexafluor-488 or Alexafluor-594 conjugated, anti-Rabbit or anti-Mouse IgG, Thermo Scientific) in ADB (1:200) for 1 hour at room temperature. Nuclei were counterstained with DAPI.

**Quantification of membrane localized of Dsp, Dsg and E-cadherin in cultured cells:** Border index for each protein was calculated based on the method published by (Godsel et al, J Cell Biol, 2005). Briefly, all immunofluorescence procedures, epifluorescence acquisition settings, and image analysis parameters were maintained across all technical and biological replicates for the analysis of a protein stain. For each sampled cell, a region of interest was manually drawn around its borders using ImageJ, and the same threshold was applied to remove background noise. For each thresholded region of interest, the border index was calculated by multiplying the mean fluorescence intensity by the area of the region of interest and divided by the border perimeter. **Quantification of cell perimeter:** The perimeter of each cell was manually outlined as a region of interest and the perimeter was measured in pixels. **Quantification of nuclear Smad2/3 intensity:** Cells were stained with DAPI to mark nuclei (blue channel) and anti-total Smad2/3 (green channel). Images were analyzed using ImageJ. The blue channel was used to segment nuclei as follows: the Smooth function was used 3 times, then images were thresholded to remove background, converted to binary images on which a Watershed function was applied to separate overlapping nuclei. Then the analyze Particles function was used for automatic detection of nuclear outlines. These nuclear outlines were applied to the green channel and mean fluorescence intensity of Smad2/3 within the regions was measured.

**Transmission Electron Microscopy:** Mouse skin samples were fixed in 2.5% glutaraldehyde, 3mM MgCl<sub>2</sub> and 1% sucrose, in 0.1 M sodium cacodylate buffer, pH 7.2 at 4°C overnight, followed by 3 buffer rinses, 15 minutes each, in 3mM MgCl<sub>2</sub>, 3% sucrose and 0.1 M sodium cacodylate. The samples were post-fixed in 1% osmium tetroxide in 0.1 M sodium cacodylate for 1 hour on ice in the dark, rinsed twice with distilled water for 5 minutes, stained with 2% aqueous uranyl acetate (0.22 µm filtered) for 1 hour in the dark, followed by dehydration in an ascending grade of ethanol (50%, 70%, 90% and 100%; thrice each) and embedded in an epoxy resin. The resin was allowed to polymerize at 37°C overnight for 2-3 days followed by 60°C overnight.

**Microarray analysis:** Mouse epidermis was separated from the dermis following incubation of E18.5 embryonic skin with 3.8% Ammonium thiocynate (A7149, Sigma-Aldrich) for 10 minutes at room temperature. The epidermal sheet was homogenized in TRIzol and total RNA prepared using the TRIzol RNA extraction protocol (Thermo Fisher Scientific) at the Johns Hopkins Deep Sequencing & Microarray Core Facility. Integrity and concentration of RNA was evaluated using the Bioanalyzer 2100 (Agilent Technologies, Santa Clara, CA USA). Labeled cDNA probes were synthesized from reverse-transcribed mRNA templates and hybridized to the Affymetrix GeneChip® Mouse Transcriptome Array MTA 1.0 (Affymetrix Inc., Santa Clara, CA USA). Samples from six biological replicates each of RHEB WT and RHEB cKO mice were analyzed. Raw data generated as CEL files by the Affymetrix Expression Console were imported into the Partek Genomics Suite v6.6 for analysis. Data were normalized and log2 transformed with the RMA (Robust Multi-Array Average) algorithm, underwent quality control, and were compared using a two tailed one way ANOVA between their two biological classes: *RHEB* cKO and *RHEB* WT. The list of 1,198 highly differentially expressed genes, with fold changes greater than 2 S.D. between RHEB WT versus RHEB cKO, is in **Supplementary Table S1**. These differentially expressed genes then underwent Canonical Pathway analysis using the Ingenuity Pathway Analysis platform (IPA, QIAGEN Redwood City, CA USA [www.ingenuity.com](http://www.ingenuity.com)).

Supplementary Table S1: Differentially expressed genes (&gt;2SD) in RHEB cKO vs WT epidermis at E18.5

Probeset ID	RHEB_cK			RHEB_cK			RHEB_cKO vs. WT (Description)			RHEB_cK			SD			Gene			Gene		
	O vs. WT (p-val)	O vs. WT Lin(FC)	O vs. WT (Description)	O vs. WT Log2(FC)	RHEB_cKO vs. WT Log2(FC)	RHEB_cKO vs. WT Log2(FC)	O vs. WT Log2(FC)	RHEB_cKO vs. WT Log2(FC)	CytoLoc	Gene EntrezID	Gene EntrezID	Gene Symbol	Gene Title								
TC0300000E 0.000797	38.4788	RHEB_cKO up vs WT		5.26599 > +6σ	3 F1-F2 3 :	20201	20201	S100a8	S100 calcium binding protein A8 (calgranulin A)												
TC0300002E 0.000305	34.0958	RHEB_cKO up vs WT		5.09152 > +6σ	3 F1-F2 3 :	20202	20202	S100a9	S100 calcium binding protein A9 (calgranulin B)												
TC0300000E 0.00115	21.4185	RHEB_cKO up vs WT		4.42078 > +6σ	3 F1 3 40 :	20760	20760	Sprr2f	small proline-rich protein 2F												
TC0300000E 0.002045	20.4921	RHEB_cKO up vs WT		4.357 > +6σ	3 F1 3	69520	69520	Lce3f	late cornified envelope 3F												
TC08000001 0.001408	17.7214	RHEB_cKO up vs WT		4.14742 > +6σ	8 8	27358	27358	Defb3	defensin beta 3												
TC0300000E 0.003389	16.8731	RHEB_cKO up vs WT		4.07665 > +6σ	3 F1 3 40 :	20761	20761	Sprr2g	small proline-rich protein 2G												
TC0300002E 7.08E-05	14.2322	RHEB_cKO up vs WT		3.83108 > +6σ	3 F1 3 40 :	20754	20754	Sprr1b	small proline-rich protein 1B												
TC0300000E 0.002107	13.2807	RHEB_cKO up vs WT		3.73126 > +6σ	3 F1 3	630994	630994	Lce3d	late cornified envelope 3D												
TC0300000E 0.00107	11.9369	RHEB_cKO up vs WT		3.57736 > +6σ	3 F1 3 40 :	20764	20764	Sprr2j-ps	small proline-rich protein 2J, pseudogene												
TC0300000E 0.000186	10.7404	RHEB_cKO up vs WT		3.42497 > +6σ	3 F1 3	381493	381493	S100a7a	S100 calcium binding protein A7A												
TC03000024 0.003119	10.6727	RHEB_cKO up vs WT		3.41586 > +6σ	3 F1 3	545548	545548	Lce3a	late cornified envelope 3A												
TC0300002E 0.00028	9.93365	RHEB_cKO up vs WT		3.31232 > +6σ	3 F1 3 40 :	20753	20753	Sprr1a	small proline-rich protein 1A												
TC01000013 0.004786	9.7266	RHEB_cKO up vs WT		3.28194 > +6σ	1 H1 1 63 :	19225	19225	Ptg52	prostaglandin-endoperoxide synthase 2												
TC15000022 0.000169	9.55391	RHEB_cKO up vs WT		3.25609 > +6σ	15 F2 15	406223	406223	Gm5414	predicted gene 5414												
TC16000005 0.000109	9.02367	RHEB_cKO up vs WT		3.17371 > +6σ	16 B3 16	408196	408196	Gm5416	predicted gene 5416												
TC0300000E 0.000628	8.84585	RHEB_cKO up vs WT		3.145 > +6σ	3 F1 3 40 :	20759	20759	Sprr2e	small proline-rich protein 2E												
TC15000022 0.000366	8.33038	RHEB_cKO up vs WT		3.05838 > +6σ	15 F2 15 5	16687	16687	Krt6a	keratin 6A												
TC15000017 2.76E-05	7.84124	RHEB_cKO up vs WT		2.97108 > +6σ	15 D3 15 3	11838	11838	Arc	activity regulated cytoskeletal-associated protein												
TC0200001C 0.00362	7.71179	RHEB_cKO up vs WT		2.94707 > +6σ	2 C2 2	241452	241452	Dhrs9	dehydrogenase/reductase (SDR family) member 9												
TC0500000E 0.000512	7.62878	RHEB_cKO up vs WT		2.93145 > +6σ	---	71920	71920	Epgn	epithelial mitogen												
TC08000015 0.000581	7.52137	RHEB_cKO up vs WT		2.911 > +6σ	8 A3 8	211323	211323	Nrg1	neuregulin 1												
TC0300000E 0.003576	7.06496	RHEB_cKO up vs WT		2.82068 > +6σ	3 F1 3 40 :	20758	20758	Sprr2d	small proline-rich protein 2D												
TC01000035 0.003563	7.00865	RHEB_cKO up vs WT		2.80914 > +6σ	1 H3 1	666028	666028	Gm7897	predicted gene 7897												
TC0300000E 0.000604	6.88644	RHEB_cKO up vs WT		2.78376 > +6σ	3 F1 3 40 :	20763	20763	Sprr2i	small proline-rich protein 2I												
TC06000003 9.28E-05	6.77061	RHEB_cKO up vs WT		2.75928 > +6σ	6 B1 6 14 :	14187	14187	Akr1b8	aldo-keto reductase family 1, member B8												
TC08000001 0.002984	6.73769	RHEB_cKO up vs WT		2.75225 > +6σ	8 A1 3 8	56519	56519	Defb4	defensin beta 4												
TC07000007 0.001038	6.67023	RHEB_cKO up vs WT		2.73774 > +6σ	7 B4 7 28 :	69540	69540	Klk10	kallikrein related-peptidase 10												
TC11000037 3.65E-05	6.26662	RHEB_cKO up vs WT		2.64769 > +6σ	11 D 11	16666	16666	Krt16	keratin 16												
TC0900000C 2.84E-05	6.21186	RHEB_cKO up vs WT		2.63503 > +6σ	9 A1 9 2.4	17392	17392	Mmp3	matrix metallopeptidase 3												
TC10000012 0.001279	6.17593	RHEB_cKO up vs WT		2.62666 > +6σ	10 10 C3	67603	67603	Dusp6	dual specificity phosphatase 6												
TC0100003C 1.94E-05	5.86237	RHEB_cKO up vs WT		2.55148 > +6σ	1 E4 1	93672	93672	Il24	interleukin 24												
TC11000037 4.53E-05	5.83589	RHEB_cKO up vs WT		2.54495 > +6σ	---	---	---	Gm11597	predicted gene 11597												
TC09000005 0.00182	5.79621	RHEB_cKO up vs WT		2.53511 > +6σ	9 9 B	76509	76509	Plet1	placenta expressed transcript 1												
TC13000003 0.000795	5.12175	RHEB_cKO up vs WT		2.35664 > +6σ	13 A3.2 13 :	218121	218121	Mboat1	membrane bound O-acyltransferase domain containing 1												
TC18000001 0.001223	5.00993	RHEB_cKO up vs WT		2.32479 > +6σ	18 A2 18 1	13512	13512	Dsg3	desmoglein 3												
TC0300000E 0.002529	4.95249	RHEB_cKO up vs WT		2.30815 > +6σ	3 F1 3 40 :	20762	20762	Sprr2h	small proline-rich protein 2H												
TC02000044 0.006298	4.69922	RHEB_cKO up vs WT		2.23242 > +6σ	2 E5 2	329502	329502	Pla2g4e	phospholipase A2, group IVE												
TC15000022 0.001025	4.61868	RHEB_cKO up vs WT		2.20748 > +6σ	15 F2 15	432985	432985	Gm5476	type II keratin Kb17P pseudogene												
TC01000037 0.000206	4.59703	RHEB_cKO up vs WT		2.2007 > +6																	

TC17000015	0.000382	3.14671 RHEB_cKO up vs WT	1.65384 +6σ	17 A3.3 17	27279	27279 Tnfrsf12a	tumor necrosis factor receptor superfamily, member 12a
TC02000018	0.000228	3.13125 RHEB_cKO up vs WT	1.64674 +6σ	2 E5 2	99439	99439 Duox1	dual oxidase 1
TC05000006	0.015846	3.10094 RHEB_cKO up vs WT	1.63271 +6σ	5 C3.2 5	231293	231293 Cwh43	cell wall biogenesis 43 C-terminal homolog
TC04000036	0.002311	3.06675 RHEB_cKO up vs WT	1.61671 +6σ	4 4 D3	94242	94242 Tinagl1	tubulointerstitial nephritis antigen-like 1
TC04000012	0.037862	3.03854 RHEB_cKO up vs WT	1.60338 +6σ	---	---	---	Gm12840 predicted gene 12840
TC15000022	0.000134	3.03736 RHEB_cKO up vs WT	1.60282 +6σ	15 F2 15	432987	432987 Gm5478	predicted pseudogene 5478
TC03000003	0.030245	3.03565 RHEB_cKO up vs WT	1.60201 +6σ	3 B 3	18415	18415 Hspa4l	heat shock protein 4 like
TC11000020	0.003938	3.0342 RHEB_cKO up vs WT	1.60132 +6σ	11 E2 11 8	111241	111241 Hmga1-rs1	high mobility group AT-hook I, related sequence 1
TC0X000006	0.002403	3.01754 RHEB_cKO up vs WT	1.59337 +6σ	X X B	75590	75590 Dusp9	dual specificity phosphatase 9
TC04000024	0.450121	3.0145 RHEB_cKO up vs WT	1.59192 +6σ	---	---	---	Gm13303 predicted gene 13303
TC01000038	0.000483	3.01073 RHEB_cKO up vs WT	1.59011 +6σ	1 E2.1 1 5	18788	18788 Serpinb2	serine (or cysteine) peptidase inhibitor, clade B, member 2
TC15000010	0.006292	3.00474 RHEB_cKO up vs WT	1.58724 +6σ	15 15 F	15370	15370 Nr4a1	nuclear receptor subfamily 4, group A, member 1
TC15000021	0.016427	2.97788 RHEB_cKO up vs WT	1.57429 +6σ	15 F1 15	67760	67760 Slc38a2	solute carrier family 38, member 2
TC11000009	0.0173	2.93686 RHEB_cKO up vs WT	1.55427 +6σ	11 B3 11 4	20670	20670 Sox15	SRY (sex determining region Y)-box 15
TC03000008	0.00939	2.92758 RHEB_cKO up vs WT	1.54971 +6σ	3 F1 3 40.	20765	20765 Sprr2k	small proline-rich protein 2K
TC18000013	0.006423	2.9234 RHEB_cKO up vs WT	1.54765 +6σ	18 D3 18	106878	106878 Smim3	small integral membrane protein 3
TC08000025	0.001733	2.91911 RHEB_cKO up vs WT	1.54553 +6σ	8 C2 8 40.	26364	26364 Adgre5	adhesion G protein-coupled receptor E5
TC0X000011	0.002878	2.90195 RHEB_cKO up vs WT	1.53702 +6σ	---	---	---	Gm14928 predicted gene 14928
TC12000001	0.01698	2.89631 RHEB_cKO up vs WT	1.53421 +6σ	---	---	---	Gm22303 predicted gene, 22303
TC04000034	0.004154	2.89503 RHEB_cKO up vs WT	1.53358 +6σ	4 4 D1	76574	76574 Mfsd2a	major facilitator superfamily domain containing 2A
TC0X000027	0.002694	2.89286 RHEB_cKO up vs WT	1.5325 +6σ	---	---	---	Gm9115 predicted gene 9115
TC08000030	0.002655	2.89014 RHEB_cKO up vs WT	1.53114 +6σ	8 E1 8 70.	20539	20539 Slc7a5	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5
TC08000006	0.00167	2.88347 RHEB_cKO up vs WT	1.52781 +6σ	8 B3.3 8	234344	234344 Naf1	nuclear assembly factor 1 ribonucleoprotein
TC0X000019	0.032636	2.86324 RHEB_cKO up vs WT	1.51765 +6σ	---	---	---	Gm26652 predicted gene, 26652
TC14000022	0.004807	2.84225 RHEB_cKO up vs WT	1.50703 +6σ	14 D1 14 8	19229	19229 Ptk2b	PTK2 protein tyrosine kinase 2 beta
TC04000028	0.01973	2.84022 RHEB_cKO up vs WT	1.506 +6σ	4 C1 4 34.	21923	21923 Tnc	tenascin C
TC04000004	0.351385	2.82231 RHEB_cKO up vs WT	1.49688 +6σ	---	---	---	Gm10600 predicted gene 10600
TC08000001	0.004036	2.81174 RHEB_cKO up vs WT	1.49147 +6σ	8 A1.3 8	244332	244332 Defb14	defensin beta 14
TC11000037	0.010257	2.80846 RHEB_cKO up vs WT	1.48978 +6σ	11 D 11 6	16664	16664 Krt14	keratin 14
TC17000021	0.005917	2.79185 RHEB_cKO up vs WT	1.48122 +6σ	17 17 C	71583	71583 9130008F	RIKEN cDNA 9130008F23 gene
TC08000010	0.003112	2.78162 RHEB_cKO up vs WT	1.47592 +6σ	8 C5 8 46.	17750	17750 Mt2	metallothionein 2
TC05000008	0.004343	2.77443 RHEB_cKO up vs WT	1.47219 +6σ	5 E1 5 44.	11839	11839 Areg	amphiregulin
TC05000036	0.006398	2.76923 RHEB_cKO up vs WT	1.46949 +6σ	5 G3 5 88.	11987	11987 Slc7a1	solute carrier family 7 (cationic amino acid transporter, y+ system), member 1
TC10000022	0.00206	2.76193 RHEB_cKO up vs WT	1.46567 +6σ	10 B4-B5.1	56200	56200 Ddx21	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21
TC09000033	0.010264	2.75115 RHEB_cKO up vs WT	1.46003 +6σ	9 F 9 74.2	102680	102680 Slc6a20a	solute carrier family 6 (neurotransmitter transporter), member 20A
TC11000038	0.001401	2.7354 RHEB_cKO up vs WT	1.45175 +6σ	11 D 11 6	18612	18612 Etv4	ets variant 4
TC09000020	0.006021	2.72785 RHEB_cKO up vs WT	1.44776 +6σ	---	---	---	RP24-570C NOP56 ribonucleoprotein (Nop56) pseudogene
TC01000014	0.006913	2.71295 RHEB_cKO up vs WT	1.43986 +6σ	1 G3-H1 1	11352	11352 Abi2	v-abl Abelson murine leukemia viral oncogene 2 (arg, Abelson-related gene)
TC01000038	0.07734	2.70829 RHEB_cKO up vs WT	1.43738 +6σ	1 E2.1 1	241197	241197 Serpinb10	serine (or cysteine) peptidase inhibitor, clade B (ovalbumin), member 10
TC03000008	0.064026	2.68853 RHEB_cKO up vs WT	1.42682 +6σ	3 F1 3	94060	94060 Lce3c	late cornified envelope 3C
TC04000004	0.34438	2.66305 RHEB_cKO up vs WT	1.41308 +6σ	---	1.01E+08	1.01E+08 Gm13301	predicted gene 13301
TC03000029	0.001488	2.65905 RHEB_cKO up vs WT	1.41091 +6σ	3 G3 3	74442	74442 Sgms2	sphingomyelin synthase 2
TC08000015	0.004259	2.65721 RHEB_cKO up vs WT	1.40991 +6σ	8 E2 8	16412	16412 Itgb1	integrin beta 1 (fibronectin receptor beta)
TC08000012	0.002616	2.65082 RHEB_cKO up vs WT	1.40644 +6σ	8 D3 8	21771	21771 Cirh1a	cirrhosis, autosomal recessive 1A (human)
TC17000005	0.009401	2.63512 RHEB_cKO up vs WT	1.39787 +6σ	17 17	11307	11307 Abcg1	ATP-binding cassette, sub-family G (WHITE), member 1
TC04000003	0.473544	2.63225 RHEB_cKO up vs WT	1.3963 +6σ	---	---	---	Gm10601 predicted pseudogene 10601
TC13000012	0.001813	2.62656 RHEB_cKO up vs WT	1.39317 +6σ	13 13 D2.1	20620	20620 Plk2	polo-like kinase 2
TC13000002	0.023155	2.62243 RHEB_cKO up vs WT	1.39091 +6σ	13 A2-A3 1	319181	319181 Hist1h2bg	histone cluster 1, H2bg
TC07000008	0.007607	2.62087 RHEB_cKO up vs WT	1.39004 +6σ	7 B4 7	243983	243983 Zdhhc13	zinc finger, DHHC domain containing 13
TC15000021	0.002635	2.61618 RHEB_cKO up vs WT	1.38746 +6σ	15 F1 15 5	19011	19011 Endou	endonuclease, polyU-specific
TC06000032	0.005444	2.61445 RHEB_cKO up vs WT	1.38651 +6σ	---	1.02E+08	1.02E+08 Mir7649	microRNA 7649
TC19000000	0.00129	2.60231 RHEB_cKO up vs WT	1.3798 +6σ	19 A 19 4.	14283	14283 Fosl1	fos-like antigen 1
TC11000034	0.124897	2.60171 RHEB_cKO up vs WT	1.37946 +6σ	11 C 11	76113	76113 Lpo	lactoperoxidase
TC04000037	0.000181	2.60055 RHEB_cKO up vs WT	1.37882 +6σ	4 D3 4 66.	55948	55948 Sfn	stratifin
TC05000034	0.006834	2.60023 RHEB_cKO up vs WT	1.37864 +6σ	5 G2 5	18787	18787 Serpine1	serine (or cysteine) peptidase inhibitor, clade E, member 1
TC06000024	0.026496	2.59717 RHEB_cKO up vs WT	1.37694 +6σ	6 6 D-E	54486	54486 Hpgds	hematopoietic prostaglandin D synthase
TC16000019	0.008612	2.59685 RHEB_cKO up vs WT	1.37676 +6σ	16 C3-C5 :	11504	11504 Adams1	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin
TC14000016	0.006194	2.5938 RHEB_cKO up vs WT	1.37507 +6σ	14 B 14 19	30877	30877 Gnl3	guanine nucleotide binding protein-like 3 (nucleolar)
TC19000000	0.002755	2.59169 RHEB_cKO up vs WT	1.37389 +6σ	19 A 19	13340	13340 Slc29a2	solute carrier family 29 (nucleoside transporters), member 2
TC13000017	0.006704	2.58474 RHEB_cKO up vs WT	1.37002 +6σ	13 13 A4	73710	73710 Tubb2b	tubulin, beta 2B class IIb
TC13000016	0.013611	2.58412 RHEB_cKO up vs WT	1.36967 +6σ	---	---	---	Gm22358 predicted gene, 22358
TC10000026	0.009577	2.58177 RHEB_cKO up vs WT	1.36836 +6σ	10 C1 10	70683	70683 Utp20	UTP20 small subunit processome component
TC19000006	0.002707	2.58157 RHEB_cKO up vs WT	1.36825 +6σ	19 C3 19	70769	70769 Nolc1	nucleolar and coiled-body phosphoprotein 1
TC02000008	0.00444	2.56297 RHEB_cKO up vs WT	1.35781 +6σ	2 C1.1 2 3	14571	14571 Gpd2	glycerol phosphate dehydrogenase 2, mitochondrial
TC04000013	0.000539	2.56111 RHEB_cKO up vs WT	1.35677 +6σ				

TC0700002C	0.108219	2.44806 RHEB_cKO up vs WT	1.29164 +6σ	---	---	---	Gm26143	predicted gene, 26143
TC01000034	0.086204	2.44491 RHEB_cKO up vs WT	1.28978 +6σ	1 H 2.2 1 7	11931	11931 Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide	
TC15000015	0.039124	2.43971 RHEB_cKO up vs WT	1.28671 +6σ	15 15 20.€	1.01E+08	1.01E+08 Gm19551	predicted gene, 19551	
TC02000041	0.046132	2.43665 RHEB_cKO up vs WT	1.2849 +6σ	---	---	---	Gm13805	predicted gene 13805
TC07000007	0.273927	2.4361 RHEB_cKO up vs WT	1.28457 +6σ	7 B4 7 28.	13646	13646 Klk1b22	kallikrein 1-related peptidase b22	
TC18000014	0.001773	2.42948 RHEB_cKO up vs WT	1.28065 +6σ	18 E1 18	54670	54670 Atp8b1	ATPase, class I, type 8B, member 1	
TC14000003	0.034239	2.42672 RHEB_cKO up vs WT	1.27901 +6σ	14 B 14 20	11752	11752 Anxa8	annexin A8	
TC11000004	0.008333	2.42292 RHEB_cKO up vs WT	1.27675 +6σ	---	---	---	Gm12141	predicted gene 12141
TC01000032	0.041196	2.41742 RHEB_cKO up vs WT	1.27347 +6σ	1 H 1 1 65.	16782	16782 Lamc2	laminin, gamma 2	
TC07000025	6.03E-05	2.41237 RHEB_cKO up vs WT	1.27045 +6σ	7 A3 7 9.9	12051	12051 Bcl3	B cell leukemia/lymphoma 3	
TC1000000C	0.006142	2.39678 RHEB_cKO up vs WT	1.2611 +6σ	X E3 X 56.	30058	30058 Timm8a1	translocase of inner mitochondrial membrane 8A1	
TC1500001C	0.005366	2.39656 RHEB_cKO up vs WT	1.26096 +6σ	15 F1 15	239667	239667 Dip2b	disco interacting protein 2 homolog B	
TC05000017	0.008142	2.39453 RHEB_cKO up vs WT	1.25974 +6σ	5 G2 5 81.	14086	14086 Fscn1	fascin actin-bundling protein 1	
TC09000004	0.009998	2.38879 RHEB_cKO up vs WT	1.25628 +6σ	9 9 B	58235	58235 Pvrl1	poliovirus receptor-related 1	
TC08000019	0.003855	2.38599 RHEB_cKO up vs WT	1.25459 +6σ	8 A3 8	67920	67920 Mak16	MAK16 homolog	
TCOX000015	0.006736	2.38293 RHEB_cKO up vs WT	1.25274 +6σ	X F3 X	56360	56360 Acot9	acyl-CoA thioesterase 9	
TCOX000032	0.000221	2.38043 RHEB_cKO up vs WT	1.25122 +6σ	---	---	---	Gm15242	predicted gene 15242
TC09000002	0.000883	2.37946 RHEB_cKO up vs WT	1.25064 +6σ	9 A3 9 7.8	16835	16835 Ldlr	low density lipoprotein receptor	
TCOX000034	0.011013	2.3746 RHEB_cKO up vs WT	1.24768 +6σ	X D X 43.9	16186	16186 Il2rg	interleukin 2 receptor, gamma chain	
TC0500000E	0.006214	2.37218 RHEB_cKO up vs WT	1.24621 +6σ	5 C3.2 5	231287	231287 Atp10d	ATPase, class V, type 10D	
TC0300000E	0.006331	2.36885 RHEB_cKO up vs WT	1.24419 +6σ	3 F1-F2 3.	20194	20194 S100a10	S100 calcium binding protein A10 (calpastatin)	
TC14000001	0.004403	2.36291 RHEB_cKO up vs WT	1.24056 +6σ	14 A2 14	218756	218756 Slc4a7	solute carrier family 4, sodium bicarbonate cotransporter, member 7	
TC06000024	0.008184	2.35803 RHEB_cKO up vs WT	1.23758 +6σ	6 C1 6	232087	232087 Mat2a	methionine adenosyltransferase II, alpha	
TC02000051	0.012744	2.357 RHEB_cKO up vs WT	1.23695 +6σ	2 H 2	20568	20568 Slpi	secretory leukocyte peptidase inhibitor	
TCOX000003	0.009719	2.35554 RHEB_cKO up vs WT	1.23606 +6σ	X A3.3 X 2	16164	16164 Il13ra1	interleukin 13 receptor, alpha 1	
TC11000019	0.020165	2.35227 RHEB_cKO up vs WT	1.23406 +6σ	11 E2 11 8	192897	192897 Itgb4	integrin beta 4	
TC08000002	0.002577	2.35209 RHEB_cKO up vs WT	1.23394 +6σ	8 A1.3 8	654455	654455 Gm21944	defensin beta 48 pseudogene	
TC1400000C	0.002156	2.35045 RHEB_cKO up vs WT	1.23294 +6σ	14 A1 14	286940	286940 Flnb	filamin, beta	
TC1200000E	0.08041	2.33112 RHEB_cKO up vs WT	1.22103 +6σ	12 D2 12 3	14281	14281 Fos	FBJ osteosarcoma oncogene	
TC09000007	0.006	2.32941 RHEB_cKO up vs WT	1.21996 +6σ	9 B 9 32.0	18746	18746 Pkm	pyruvate kinase, muscle	
TC0900000E	0.016451	2.32839 RHEB_cKO up vs WT	1.21934 +6σ	---	---	---	Gm22571	predicted gene, 22571
TC12000012	0.012503	2.3278 RHEB_cKO up vs WT	1.21897 +6σ	12 F1 12 €	68337	68337 Crip2	cysteine rich protein 2	
TC15000011	0.020176	2.32714 RHEB_cKO up vs WT	1.21856 +6σ	15 A1 15 3	18414	18414 Osmr	oncostatin M receptor	
TC0400003E	0.010512	2.32374 RHEB_cKO up vs WT	1.21645 +6σ	4 E1 4 74.	27984	27984 Efhd2	EF hand domain containing 2	
TC0300001E	0.009815	2.32354 RHEB_cKO up vs WT	1.21632 +6σ	3 B 3 17.4	11747	11747 Anxa5	annexin A5	
TC16000017	0.001758	2.31904 RHEB_cKO up vs WT	1.21353 +6σ	16 16 C1.2	80859	80859 Nfkbbz	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, zeta	
TC0700003E	0.038471	2.31636 RHEB_cKO up vs WT	1.21186 +6σ	7 D3 7	12173	12173 Bnc1	basonuclin 1	
TC06000001	0.002841	2.31191 RHEB_cKO up vs WT	1.20908 +6σ	6 A3.1 6	19283	19283 Ptprz1	protein tyrosine phosphatase, receptor type Z, polypeptide 1	
TC12000013	0.009546	2.31085 RHEB_cKO up vs WT	1.20843 +6σ	12 F2 12 €	52635	52635 Esyt2	extended synaptotagmin-like protein 2	
TC09000022	0.002557	2.31073 RHEB_cKO up vs WT	1.20835 +6σ	9 A5.3 9	244871	244871 Zc3h12c	zinc finger CCCH type containing 12C	
TC19000016	0.024585	2.31065 RHEB_cKO up vs WT	1.2083 +6σ	19 D1 19 ↴	12821	12821 Col17a1	collagen, type XVII, alpha 1	
TC04000034	0.000176	2.30911 RHEB_cKO up vs WT	1.20734 +6σ	4 D2.2 4	442834	442834 D830031N RIKEN cDNA D830031N03 gene		
TC0200004E	0.00019	2.30822 RHEB_cKO up vs WT	1.20678 +6σ	2 F1 2	269356	269356 Slc4a11	solute carrier family 4, sodium bicarbonate transporter-like, member 11	
TC17000002	0.01256	2.30802 RHEB_cKO up vs WT	1.20666 +6σ	17 A3.2 17	75202	75202 Spaca6	sperm acrosome associated 6	
TC13000015	0.008763	2.29914 RHEB_cKO up vs WT	1.20611 +6σ	13 A3.1 13	665596	665596 Hist1h2bq	histone cluster 1, H2bq	
TC0300003C	0.000417	2.29094 RHEB_cKO up vs WT	1.19594 +6σ	3 G3 3	75624	75624 Metap1	methionyl aminopeptidase 1	
TC01000034	0.010828	2.28852 RHEB_cKO up vs WT	1.19442 +6σ	1 H 2.3 1	80914	80914 Uck2	uridine-cytidine kinase 2	
TC0600000E	0.003826	2.28682 RHEB_cKO up vs WT	1.19334 +6σ	6 B3 6 25.	1.03E+08	1.03E+08 Halr1	Hoxa adjacent long noncoding RNA 1	
TC17000014	0.165692	2.28502 RHEB_cKO up vs WT	1.19221 +6σ	17 A3-B 1	21826	21826 Thbs2	thrombospondin 2	
TC15000004	0.004028	2.28498 RHEB_cKO up vs WT	1.19218 +6σ	15 D2-D3	17869	17869 Myc	myelocytomatosis oncogene	
TC1900001C	0.00038	2.28278 RHEB_cKO up vs WT	1.19079 +6σ	19 A 19	56613	56613 Rps6ka4	ribosomal protein S6 kinase, polypeptide 4	
TC06000001	0.018203	2.28167 RHEB_cKO up vs WT	1.19009 +6σ	6 6 A2	12390	12390 Cav2	caveolin 2	
TC04000025	0.002033	2.27048 RHEB_cKO up vs WT	1.1813 +6σ	4 B1 4	22004	22004 Tpm2	tropomyosin 2, beta	
TC01000027	0.013046	2.26745 RHEB_cKO up vs WT	1.18107 +6σ	1 D 1 43.9	17975	17975 Ncl	nucleolin	
TC19000004	0.152721	2.26732 RHEB_cKO up vs WT	1.18099 +6σ	19 C1 19 ↴	23972	23972 Papss2	3'-phosphoadenosine 5'-phosphosulfate synthase 2	
TC07000041	0.008662	2.26426 RHEB_cKO up vs WT	1.17904 +6σ	7 F2 7	66922	66922 Rras2	related RAS viral (r-ras) oncogene 2	
TC0500001E	0.004909	2.25272 RHEB_cKO up vs WT	1.17167 +6σ	5 G2 5 76.	26433	26433 Plod3	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3	
TC06000015	0.032433	2.24876 RHEB_cKO up vs WT	1.16913 +6σ	6 6 8.16 cl	1.01E+08	1.01E+08 Gm20186	predicted gene, 20186	
TC08000011	0.004625	2.24718 RHEB_cKO up vs WT	1.16812 +6σ	8 D1 8 47.	14766	14766 Adgrg1	adhesion G protein-coupled receptor G1	
TCOX000032	0.000395	2.24578 RHEB_cKO up vs WT	1.16722 +6σ	X F3-F4 X	20229	20229 Sat1	spermidine/spermine N1-acetyl transferase 1	
TC07000017	0.119358	2.23776 RHEB_cKO up vs WT	1.16205 +6σ	7 F2 7 65.1	20278	20278 Scnn1g	sodium channel, nonvoltage-gated 1 gamma	
TC02000032	0.001076	2.23522 RHEB_cKO up vs WT	1.16042 +6σ	2 B 2 21.7	64292	64292 Ptges	prostaglandin E synthase	
TC09000021	0.008606	2.22946 RHEB_cKO up vs WT	1.1567 +6σ	9 A5.1 9 2	102644	102644 Oaf	out at first homolog	
TC04000019	0.000614	2.22912 RHEB_cKO up vs WT	1.15648 +6σ	4 E2 4	20810	20810 Srm	spermidine synthase	
TC19000015	0.00							

TC17000025	0.00502	2.17687 RHEB_cKO up vs WT	1.12226 +6σ	17 E3 17	260409	260409 Cdc42ep3	CDC42 effector protein (Rho GTPase binding) 3
TC09000026	7.27E-06	2.17452 RHEB_cKO up vs WT	1.1207 +6σ	9 D 9 42.3	50772	50772 Mapk6	mitogen-activated protein kinase 6
TC08000006	0.019563	2.17224 RHEB_cKO up vs WT	1.11919 +6σ	8 B3 2 8	15446	15446 Hpgd	hydroxyprostaglandin dehydrogenase 15 (NAD)
TC11000011	0.014234	2.17019 RHEB_cKO up vs WT	1.11782 +6σ	---	---	Gm12346	predicted gene 12346
TC04000023	0.008556	2.16965 RHEB_cKO up vs WT	1.11746 +6σ	---	---	Gm11902	predicted gene 11902
TC19000009	0.009041	2.16955 RHEB_cKO up vs WT	1.1174 +6σ	---	---	Gm8034	predicted gene 8034
TC08000001	0.210172	2.16738 RHEB_cKO up vs WT	1.11595 +6σ	8 A1.3 8	116746	116746 Defb6	defensin beta 6
TC06000022	0.004977	2.16498 RHEB_cKO up vs WT	1.11435 +6σ	6 6 B3	71720	71720 Osbpl3	oxysterol binding protein-like 3
TC03000027	0.002386	2.16494 RHEB_cKO up vs WT	1.11433 +6σ	3 F2.3 3 4	99738	99738 Kcnc4	potassium voltage gated channel, Shaw-related subfamily, member 4
TC0X000017	0.0044594	2.15963 RHEB_cKO up vs WT	1.11078 +6σ	---	---	Gm14373	predicted gene 14373
TC06000028	0.002428	2.15571 RHEB_cKO up vs WT	1.10816 +6σ	---	---	Gm16433	predicted gene 16433
TC08000009	0.001099	2.15474 RHEB_cKO up vs WT	1.10752 +6σ	8 8	723960	723960 Mir24-2	microRNA 24-2
TC02000035	0.023976	2.15374 RHEB_cKO up vs WT	1.10685 +6σ	---	---	Gm13487	predicted gene 13487
TC08000010	0.014473	2.15308 RHEB_cKO up vs WT	1.1064 +6σ	8 C5 8 46.	17748	17748 Mt1	metallothionein 1
TC01000024	0.007174	2.15305 RHEB_cKO up vs WT	1.10638 +6σ	1 1 C1-C3	93691	93691 Klf7	Kruppel-like factor 7 (ubiquitous)
TC07000025	0.002915	2.15068 RHEB_cKO up vs WT	1.10479 +6σ	7 A3 7 9.9	52118	52118 Pvr	poliovirus receptor
TC0500000C	0.00137	2.14988 RHEB_cKO up vs WT	1.10425 +6σ	---	---	Gm26825	predicted gene 26825
TC10000012	0.011318	2.14347 RHEB_cKO up vs WT	1.09995 +6σ	10 D1 10	237542	237542 Osbpl8	oxysterol binding protein-like 8
TC16000004	0.005072	2.14145 RHEB_cKO up vs WT	1.09859 +6σ	16 B3 16 :	22042	22042 Tfrc	transferrin receptor
TC09000016	0.031583	2.1399 RHEB_cKO up vs WT	1.09755 +6σ	9 F4 9	319626	319626 9530059014 gene	RIKEN cDNA 9530059014 gene
TC01000002	0.000911	2.13783 RHEB_cKO up vs WT	1.09614 +6σ	1 B 1	226971	226971 Plekhb2	pleckstrin homology domain containing, family B (evectins) member 2
TC10000017	0.007113	2.1368 RHEB_cKO up vs WT	1.09545 +6σ	---	---	Gm8355	predicted pseudogene 8355
TC14000012	0.003423	2.13597 RHEB_cKO up vs WT	1.09489 +6σ	---	---	Tpm3-rs7	tropomyosin 3, related sequence 7
TC03000006	0.042616	2.13398 RHEB_cKO up vs WT	1.09355 +6σ	---	---	Gm25188	predicted gene 25188
TC0300001C	0.002299	2.13389 RHEB_cKO up vs WT	1.09349 +6σ	3 F2.2 3 4	18049	18049 Ngf	nerve growth factor
TC1500001C	0.01517	2.13315 RHEB_cKO up vs WT	1.09299 +6σ	15 F1 15	207214	207214 Larp4	La ribonucleoprotein domain family, member 4
TC08000004	0.003808	2.12944 RHEB_cKO up vs WT	1.09048 +6σ	---	---	Gm6180	predicted pseudogene 6180
TC04000026	0.001297	2.12861 RHEB_cKO up vs WT	1.08991 +6σ	4 B1 4	381605	381605 Tbc1d2	TBC1 domain family, member 2
TC04000036	0.001526	2.12789 RHEB_cKO up vs WT	1.08943 +6σ	4 D2.2 4	230779	230779 Serinc2	serine incorporator 2
TC02000015	0.007555	2.12606 RHEB_cKO up vs WT	1.08818 +6σ	2 F3 2	20017	20017 Polr1b	polymerase (RNA) I polypeptide B
TC0X000004	0.006711	2.12255 RHEB_cKO up vs WT	1.0858 +6σ	---	---	Gm14584	predicted gene 14584
TC03000017	0.000314	2.1215 RHEB_cKO up vs WT	1.08509 +6σ	11 E1 11	16647	16647 KpnA2	karyopherin (importin) alpha 2
TC15000023	0.012999	2.12106 RHEB_cKO up vs WT	1.08479 +6σ	15 D3 15 :	18810	18810 Plec	plectin
TC06000016	0.022411	2.12069 RHEB_cKO up vs WT	1.08454 +6σ	6 G1 6 66.	13730	13730 Emp1	epithelial membrane protein 1
TC10000004	0.00077	2.12044 RHEB_cKO up vs WT	1.08436 +6σ	10 B2-B3 :	19072	19072 Prep	prolyl endopeptidase
TC0600003C	0.000378	2.11745 RHEB_cKO up vs WT	1.08233 +6σ	6 F1 6	111173	111173 Erc1	ELKS/RAB6-interacting/CAST family member 1
TC09000026	0.02476	2.11655 RHEB_cKO up vs WT	1.08171 +6σ	9 E3.3 9 5	11933	11933 Atp1b3	ATPase, Na+/K+ transporting, beta 3 polypeptide
TC1300000C	0.002088	2.11484 RHEB_cKO up vs WT	1.08055 +6σ	13 A1 13	23849	23849 Klf6	Kruppel-like factor 6
TC17000024	0.017475	2.11197 RHEB_cKO up vs WT	1.07859 +6σ	17 E1.1 17	106572	106572 Rab31	RAB31, member RAS oncogene family
TC08000025	0.002022	2.11168 RHEB_cKO up vs WT	1.07839 +6σ	8 C 8	24015	24015 Abce1	ATP-binding cassette, sub-family E (OABP), member 1
TC14000021	0.005201	2.10994 RHEB_cKO up vs WT	1.0772 +6σ	14 14 C1	56532	56532 Ripk3	receptor-interacting serine-threonine kinase 3
TC07000026	0.081052	2.10818 RHEB_cKO up vs WT	1.076 +6σ	7 A3 7	72383	72383 Cnfn	cornifelin
TC07000003	0.003999	2.10728 RHEB_cKO up vs WT	1.07538 +6σ	7 A3 7	18793	18793 Plaur	plasminogen activator, urokinase receptor
TC02000007	0.006273	2.10114 RHEB_cKO up vs WT	1.07117 +6σ	---	---	Gm13588	predicted gene 13588
TC02000041	0.072358	2.1 RHEB_cKO up vs WT	1.07039 +6σ	---	---	Gm13797	predicted gene 13797
TC02000041	0.006381	2.09929 RHEB_cKO up vs WT	1.0699 +6σ	---	---	Gm10800	predicted gene 10800
TC1900000C	0.000312	2.09896 RHEB_cKO up vs WT	1.06968 +6σ	19 B1-3 19	19697	19697 Rela	v-rel reticuloendotheliosis viral oncogene homolog A (avian)
TC02000025	0.023779	2.09853 RHEB_cKO up vs WT	1.06938 +6σ	2 A1 2	170768	170768 Pfkfb3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3
TC15000017	0.000651	2.0954 RHEB_cKO up vs WT	1.06723 +6σ	15 D3 15 :	12181	12181 Bop1	block of proliferation 1
TC0500000C	0.012228	2.09439 RHEB_cKO up vs WT	1.06653 +6σ	5 A2-A3 5	12571	12571 Cdk6	cyclin-dependent kinase 6
TC0X000024	0.038167	2.09346 RHEB_cKO up vs WT	1.06589 +6σ	X A7.3 X 3	192176	192176 Flna	filamin, alpha
TC04000032	0.006253	2.09288 RHEB_cKO up vs WT	1.06549 +6σ	---	---	Gm20731	predicted gene 20731
TC05000021	0.014558	2.09075 RHEB_cKO up vs WT	1.06402 +6σ	5 B1 5	68567	68567 Cgref1	cell growth regulator with EF hand domain 1
TC05000004	0.007984	2.09062 RHEB_cKO up vs WT	1.06393 +6σ	---	---	Gm7816	predicted pseudogene 7816
TC11000036	0.004928	2.08952 RHEB_cKO up vs WT	1.06317 +6σ	11 D 11 5	140486	140486 Igf2bp1	insulin-like growth factor 2 mRNA binding protein 1
TC05000019	0.010485	2.08839 RHEB_cKO up vs WT	1.06239 +6σ	---	---	Gm15459	predicted gene 15459
TC19000014	0.008358	2.08829 RHEB_cKO up vs WT	1.06232 +6σ	19 C3 19	57753	57753 Noc3l	NOC3 like DNA replication regulator
TC14000014	0.058044	2.08734 RHEB_cKO up vs WT	1.06167 +6σ	14 A1 14	13421	13421 Dnase1l3	deoxyribonuclease 1-like 3
TC01000036	0.022822	2.08623 RHEB_cKO up vs WT	1.0609 +6σ	1 H4 1	11566	11566 Adss	adenylosuccinate synthetase, non muscle
TC16000007	6.24E-05	2.08416 RHEB_cKO up vs WT	1.05947 +6σ	16 C1.2 16	224250	224250 Clnd1	claudin domain containing 1
TC12000017	0.000526	2.0807 RHEB_cKO up vs WT	1.05707 +6σ	12 12 C	217578	217578 Baz1a	bromodomain adjacent to zinc finger domain 1A
TC02000036	0.003607	2.07733 RHEB_cKO up vs WT	1.05473 +6σ	2 C3 2 34.	16420	16420 Itgb6	integrin beta 6
TC19000013	0.008574	2.07549 RHEB_cKO up vs WT	1.05345 +6σ	19 C1 19 2	52874	52874 Pum3	pumilio RNA-binding family member 3
TC11000034	0.011285	2.07498 RHEB_cKO up vs WT	1.0531 +6σ	11 11 B5	56321	56321 Aatf	apoptosis antagonizing transcription factor
TC04000033	0.002314	2.07382 RHEB_cKO up vs WT	1.05229 +6σ	4 D2.1 4	107995	107995 Cdc20	cell division cycle 20
TC06000013	0.022103	2.0738 RHEB_cKO up vs WT	1.05228 +6σ	6 F1 6 56.!	330409	330409 Cecr2	cat eye syndrome chromosome region, candidate 2
TC02000031	0.02012	2.07187 RHEB_cKO up vs WT	1.05093 +6σ	2 A3 2			

TC01000013	0.04023	2.04818 RHEB_cKO up vs WT	1.03434 +6σ	1 F 1	1E+08	1E+08 Gm15583	predicted gene 15583
TC15000015	0.015386	2.04787 RHEB_cKO up vs WT	1.03412 +6σ	15 C 15 2C	14042	14042 Ext1	exostoses (multiple) 1
TC01000006	0.027594	2.04611 RHEB_cKO up vs WT	1.03289 +6σ	1 C3 1	67534	67534 TtlI4	tubulin tyrosine ligase-like family, member 4
TC13000024	0.040958	2.04529 RHEB_cKO up vs WT	1.03231 +6σ	X A2-A3.1	18824	18824 Plp2	proteolipid protein 2
TC11000005	0.003366	2.04496 RHEB_cKO up vs WT	1.03207 +6σ	11 B4 11 4	18432	18432 Mybbp1a	MYB binding protein (P160) 1a
TC06000018	0.003665	2.04302 RHEB_cKO up vs WT	1.0307 +6σ	6 A1 6	27053	27053 Asns	asparagine synthetase
TC08000015	0.000955	2.04256 RHEB_cKO up vs WT	1.03038 +6σ	8 E1 8	22152	22152 Tubb3	tubulin, beta 3 class III
TC05000025	0.002114	2.04216 RHEB_cKO up vs WT	1.03009 +6σ	5 F 5	100608	100608 Noc4l	NOC4 like
TC19000003	0.001038	2.04134 RHEB_cKO up vs WT	1.02952 +6σ	6 B2.3 6 2	13063	13063 Cyts	cytochrome c, somatic
TC06000008	0.007807	2.0403 RHEB_cKO up vs WT	1.02878 +6σ	6 C1 6 32.	20019	20019 Polr1a	polymerase (RNA) I polypeptide A
TC04000026	0.005491	2.03986 RHEB_cKO up vs WT	1.02847 +6σ	---	---	Amd-ps4	S-adenosylmethionine decarboxylase, pseudogene 4
TC03000002	0.002035	2.03958 RHEB_cKO up vs WT	1.02827 +6σ	3 3 B	76295	76295 Atpp1b	ATPase, class VI, type 11B
TC02000018	0.000502	2.0387 RHEB_cKO up vs WT	1.02765 +6σ	2 F1 2	214968	214968 Sema6d	sema domain, transmembrane domain (TM), and cytoplasmic domain, (sema)
TC1000000C	0.093213	2.03868 RHEB_cKO up vs WT	1.02764 +6σ	10 A1 10	76142	76142 Ppp1r14c	protein phosphatase 1, regulatory (inhibitor) subunit 14c
TC02000019	0.013934	2.03794 RHEB_cKO up vs WT	1.02711 +6σ	2 2 F3	67134	67134 Nop56	NOP56 ribonucleoprotein
TC1000003C	0.025235	2.03461 RHEB_cKO up vs WT	1.02475 +6σ	10 D2 10	73914	73914 Irak3	interleukin-1 receptor-associated kinase 3
TC05000027	0.010304	2.02945 RHEB_cKO up vs WT	1.02109 +3σ	5 E2 5	231452	231452 Sdad1	SDA1 domain containing 1
TC01000016	0.012304	2.02855 RHEB_cKO up vs WT	1.02045 +3σ	1 H3 1 79.	21346	21346 Tagln2	transgelin 2
TC17000011	0.010006	2.02673 RHEB_cKO up vs WT	1.01915 +3σ	17 E1.3 17	72515	72515 Wdr43	WD repeat domain 43
TC17000004	0.004533	2.02507 RHEB_cKO up vs WT	1.01797 +3σ	17 A3.3 17	15361	15361 Hmga1	high mobility group AT-hook 1
TC1000002C	0.007253	2.02019 RHEB_cKO up vs WT	1.01449 +3σ	10 B1 10	1E+08	Amd2	S-adenosylmethionine decarboxylase 2
TC14000026	0.005114	2.02005 RHEB_cKO up vs WT	1.01439 +3σ	14 E2.2 14	72662	72662 Dis3	DIS3 homolog, exosome endoribonuclease and 3'-5' exoribonuclease
TC0X00003C	0.021409	2.01973 RHEB_cKO up vs WT	1.01416 +3σ	---	---	Gm5762	predicted gene 5762
TC09000024	0.006252	2.01958 RHEB_cKO up vs WT	1.01405 +3σ	9 D 9	17127	17127 Smad3	SMAD family member 3
TC08000025	0.014696	2.01785 RHEB_cKO up vs WT	1.01282 +3σ	8 E1 8 62.	17132	17132 Maf	avian musculoaponeurotic fibrosarcoma oncogene homolog
TC0700002C	0.00911	2.01654 RHEB_cKO up vs WT	1.01188 +3σ	---	---	Gm15542	predicted gene 15542
TC13000005	0.00117	2.01202 RHEB_cKO up vs WT	1.00865 +3σ	13 C3 13	80289	80289 Lysmd3	LysM, putative peptidoglycan-binding, domain containing 3
TC13000003	0.001698	2.01104 RHEB_cKO up vs WT	1.00794 +3σ	---	---	Gm11366	predicted gene 11366
TC0Y000002	0.373038	2.00844 RHEB_cKO up vs WT	1.00608 +3σ	---	---	Gm21857	predicted gene, 21857
TC10000007	0.003707	2.00564 RHEB_cKO up vs WT	1.00406 +3σ	10 B5.3-C1	110279	110279 Bcr	breakpoint cluster region
TC12000006	0.00091	2.00429 RHEB_cKO up vs WT	1.00309 +3σ	12 C3 12 5	15251	15251 Hif1a	hypoxia inducible factor 1, alpha subunit
TC0200000C	0.115277	2.00404 RHEB_cKO up vs WT	1.00291 +3σ	2 A1 2	74186	74186 Ccdc3	coiled-coil domain containing 3
TC05000017	0.028417	2.00355 RHEB_cKO up vs WT	1.00256 +3σ	5 G2 5 81.	17425	17425 Foxk1	forkhead box K1
TC02000024	0.00078	2.00231 RHEB_cKO up vs WT	1.00167 +3σ	2 H2-3 28	21969	21969 Top1	topoisomerase (DNA) I
TC07000002	0.000168	1.99666 RHEB_cKO up vs WT	0.997588 +3σ	7 A3 7 9.6	13870	13870 Ercc1	excision repair cross-complementing rodent repair deficiency, complementati
TC17000013	6.03E-05	1.99623 RHEB_cKO up vs WT	0.997281 +3σ	17 E5 17	14236	14236 Foxn2	forkhead box N2
TC04000024	0.002517	1.99601 RHEB_cKO up vs WT	0.997118 +3σ	4 A5 4	230082	230082 Nol6	nucleolar protein family 6 (RNA-associated)
TC14000021	0.029665	1.99558 RHEB_cKO up vs WT	0.996806 +3σ	14 D1-E1 :	14619	14619 Gjb2	gap junction protein, beta 2
TC04000002	0.000735	1.99367 RHEB_cKO up vs WT	0.995425 +3σ	4 A3 4	68493	68493 Ndufaf4	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly factor 4
TC16000016	0.017179	1.9936 RHEB_cKO up vs WT	0.995375 +3σ	2 H1 2 76.	269378	269378 Ahcy	S-adenosylhomocysteine hydrolase
TC05000022	0.002576	1.99304 RHEB_cKO up vs WT	0.994971 +3σ	5 B3 5 20.	22388	22388 Wdr1	WD repeat domain 1
TC0M00000	0.00726	1.99284 RHEB_cKO up vs WT	0.994827 +3σ	---	---	mt-Ts2	mitochondrially encoded tRNA serine 2
TC15000017	0.000748	1.99085 RHEB_cKO up vs WT	0.993382 +3σ	---	---	Gm7935	predicted pseudogene 7935
TC0X000015	0.095379	1.99066 RHEB_cKO up vs WT	0.993249 +3σ	---	---	Gm26652	predicted gene, 26652
TC10000031	0.037007	1.99066 RHEB_cKO up vs WT	0.993245 +3σ	10 D3 10	108037	108037 Shmt2	serine hydroxymethyltransferase 2 (mitochondrial)
TC10000011	0.019743	1.98946 RHEB_cKO up vs WT	0.992377 +3σ	10 10 C3	67972	67972 Atp2b1	ATPase, Ca++ transporting, plasma membrane 1
TC16000014	0.015678	1.98943 RHEB_cKO up vs WT	0.992352 +3σ	16 B1 16	210530	210530 P3h2	prolyl 3-hydroxylase 2
TC06000005	0.031064	1.98779 RHEB_cKO up vs WT	0.991168 +3σ	6 D1 6 37.	21802	21802 Tgfa	transforming growth factor alpha
TC01000038	0.014654	1.98666 RHEB_cKO up vs WT	0.990347 +3σ	1 H4 1 83.	226747	226747 Ahctf1	AT hook containing transcription factor 1
TC0700003C	0.004794	1.98093 RHEB_cKO up vs WT	0.986181 +3σ	7 B4 7	108961	108961 E2f8	E2F transcription factor 8
TC05000003	0.007578	1.97844 RHEB_cKO up vs WT	0.984361 +3σ	5 B2 5 17.	71729	71729 Rgs12	regulator of G-protein signaling 12
TC11000022	0.011492	1.97769 RHEB_cKO up vs WT	0.983815 +3σ	11 A2 11	66249	66249 Pno1	partner of NOB1 homolog
TC13000017	0.013558	1.97702 RHEB_cKO up vs WT	0.983325 +3σ	---	---	Gm11394	predicted gene 11394
TC03000025	0.017202	1.97657 RHEB_cKO up vs WT	0.982998 +3σ	3 G3 3	214133	214133 Tet2	tet methylcytosine dioxygenase 2
TC09000022	0.012221	1.97651 RHEB_cKO up vs WT	0.982954 +3σ	9 A5.3 9 2	235320	235320 Zbtb16	zinc finger and BTB domain containing 16
TC11000036	0.010398	1.97468 RHEB_cKO up vs WT	0.981621 +3σ	11 11 D	16211	16211 Kpnb1	karyopherin (importin) beta 1
TC0900001C	0.012676	1.97445 RHEB_cKO up vs WT	0.981452 +3σ	---	---	Gm9531	predicted gene 9531
TC0900000C	0.002286	1.97319 RHEB_cKO up vs WT	0.98053 +3σ	---	---	Gm10718	predicted gene 10718
TC07000007	0.003636	1.97305 RHEB_cKO up vs WT	0.980427 +3σ	---	---	Gm15470	predicted gene 15470
TC15000023	0.010937	1.97144 RHEB_cKO up vs WT	0.979249 +3σ	15 F3 15 5	16402	16402 Itga5	integrin alpha 5 (fibronectin receptor alpha)
TC0Y000002	0.425048	1.97142 RHEB_cKO up vs WT	0.979234 +3σ	X and Y X	17318	17318 Mid1	midline 1
TC05000035	0.000504	1.97133 RHEB_cKO up vs WT	0.979168 +3σ	5 G2 5	75788	75788 Smurf1	SMAD specific E3 ubiquitin protein ligase 1
TC03000022	0.095164	1.96718 RHEB_cKO up vs WT	0.976127 +3σ	---	19870	19870 Snord73a	small nucleolar RNA, C/D box U73A
TC07000045	0.04845	1.96688 RHEB_cKO up vs WT	0.975907 +3σ	7 F5 7	66141	66141 Ifitm3	interferon induced transmembrane protein 3
TC09000005	0.002074	1.96481 RHEB_cKO up vs WT	0.974387 +3σ	9 A5.2 9 2	14012	14012 Mpz12	myelin protein zero-like 2
TC18000005	0.00974	1.96267 RHEB_cKO up vs WT	0.972819 +3σ</td				

TC1300001E 0.009147	1.94761 RHEB_cKO up vs WT	0.961702 +3σ	13 13 A5	66143	66143 Eef1e1	eukaryotic translation elongation factor 1 epsilon 1
TC02000034 0.010255	1.94694 RHEB_cKO up vs WT	0.961211 +3σ	---	---	Gm13461	predicted gene 13461
TC02000017 0.044633	1.94492 RHEB_cKO up vs WT	0.959709 +3σ	2 2	732489	732489 Mir674	microRNA 674
TC10000015 0.00549	1.9439 RHEB_cKO up vs WT	0.958957 +3σ	10 D3 10	14421	14421 B4galnt1	beta-1,4-N-acetyl-galactosaminyl transferase 1
TC05000029 0.056567	1.94238 RHEB_cKO up vs WT	0.957826 +3σ	---	1.02E+08	1.02E+08 Mir7026	microRNA 7026
TC03000026 0.026104	1.94103 RHEB_cKO up vs WT	0.956822 +3σ	3 F3 3 44.	11928	11928 Atp1a1	ATPase, Na+/K+ transporting, alpha 1 polypeptide
TC09000019 0.054458	1.94084 RHEB_cKO up vs WT	0.956682 +3σ	9 9 A4	68743	68743 Anln	anillin, actin binding protein
TC18000004 0.003466	1.93949 RHEB_cKO up vs WT	0.955676 +3σ	18 C 18	13664	13664 Eif1a	eukaryotic translation initiation factor 1A
TC08000005 0.000963	1.93755 RHEB_cKO up vs WT	0.954231 +3σ	8 C2 8	68278	68278 Ddx39	DEAD (Asp-Glu-Ala-Asp) box polypeptide 39
TC12000017 0.000345	1.93707 RHEB_cKO up vs WT	0.953879 +3σ	12 12 C1-C	18035	18035 Nfkbia	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alphasubunit
TC16000013 0.01839	1.93584 RHEB_cKO up vs WT	0.95296 +3σ	---	---	Gm6493	predicted gene 6493
TC10000010 0.008136	1.93555 RHEB_cKO up vs WT	0.952743 +3σ	10 C1 10	103136	103136 Pwp1	PWP1 homolog, endonuclease
TC15000015 0.017743	1.93493 RHEB_cKO up vs WT	0.952282 +3σ	15 D1 15	15117	15117 Has2	hyaluronan synthase 2
TC16000018 0.062407	1.93448 RHEB_cKO up vs WT	0.951949 +3σ	16 C1.3 16	72020	72020 Zfp654	zinc finger protein 654
TC05000035 0.015368	1.93447 RHEB_cKO up vs WT	0.95194 +3σ	5 G2 5	66898	66898 Baiap2l1	BAI1-associated protein 2-like 1
TC04000003 0.42491	1.9317 RHEB_cKO up vs WT	0.949868 +3σ	4 A5 4	1E+08	1E+08 Gm3893	predicted gene 3893
TC05000023 0.002053	1.9315 RHEB_cKO up vs WT	0.94972 +3σ	5 B3 5	14181	14181 Fgfbp1	fibroblast growth factor binding protein 1
TC11000039 0.007748	1.93092 RHEB_cKO up vs WT	0.94929 +3σ	11 E1 11	71795	71795 Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1
TC0X000019 0.01471	1.93 RHEB_cKO up vs WT	0.948599 +3σ	---	1.01E+08	1.01E+08 LOC100503338	uncharacterized LOC100503338
TC13000017 0.097632	1.92811 RHEB_cKO up vs WT	0.947189 +3σ	13 A4 13	66222	66222 Serpinb1a	serine (or cysteine) peptidase inhibitor, clade B, member 1a
TC10000012 0.012804	1.9281 RHEB_cKO up vs WT	0.947177 +3σ	10 D1 10	52679	52679 E2f7	E2F transcription factor 7
TC04000005 0.021108	1.92778 RHEB_cKO up vs WT	0.94694 +3σ	4 C4 4	66902	66902 Mtap	methylthioadenosine phosphorylase
TC18000003 0.015782	1.92775 RHEB_cKO up vs WT	0.946918 +3σ	18B2 18	436583	436583 Snora74a	small nucleolar RNA, H/ACA box 74A
TC02000045 0.010282	1.92649 RHEB_cKO up vs WT	0.945978 +3σ	2 E5 2	213696	213696 Duoxa1	dual oxidase maturation factor 1
TC10000026 0.02398	1.92592 RHEB_cKO up vs WT	0.94555 +3σ	10 C-D1 10	13713	13713 Elk3	ELK3, member of ETS oncogene family
TC0X000020 0.025648	1.92582 RHEB_cKO up vs WT	0.945469 +3σ	X A3.3 X	104369	104369 Snora69	small nucleolar RNA, H/ACA box 69
TC15000022 0.037716	1.92573 RHEB_cKO up vs WT	0.945409 +3σ	15 15 F1	66871	66871 Cpne8	copine VIII
TC03000006 0.015779	1.92421 RHEB_cKO up vs WT	0.944267 +3σ	3 3 F1	67738	67738 Ppid	peptidylprolyl isomerase D (cyclophilin D)
TC19000014 0.033242	1.92384 RHEB_cKO up vs WT	0.943986 +3σ	19 C2 19	226101	226101 Myof	myoferlin
TC07000020 0.005169	1.92203 RHEB_cKO up vs WT	0.942634 +3σ	7 F5 7 86.	12476	12476 Cd151	CD151 antigen
TC17000022 0.001719	1.92126 RHEB_cKO up vs WT	0.942054 +3σ	17 C 17 23	53414	53414 Bysl	bystin-like
TC13000025 0.012511	1.92125 RHEB_cKO up vs WT	0.942047 +3σ	13 D1 13	238799	238799 Tnpo1	transportin 1
TSUnmappe 0.071798	1.92072 RHEB_cKO up vs WT	0.941646 +3σ	9 9	1E+08	1E+08 Snord14e	small nucleolar RNA, C/D box 14E
TC0X000002 0.026255	1.91813 RHEB_cKO up vs WT	0.939704 +3σ	---	---	Gm1848	predicted gene 1848
TC18000014 0.011004	1.91616 RHEB_cKO up vs WT	0.938222 +3σ	---	---	Amd-ps3	S-adenosylmethionine decarboxylase, pseudogene 3
TC05000013 0.009097	1.91403 RHEB_cKO up vs WT	0.93661 +3σ	5 F 5	76199	76199 Med13l	mediator complex subunit 13-like
TC13000025 0.004536	1.91393 RHEB_cKO up vs WT	0.936541 +3σ	13 D1 13	544971	544971 Bdp1	B double prime 1, subunit of RNA polymerase III transcription initiation factor
TC02000036 2.71E-05	1.91389 RHEB_cKO up vs WT	0.936508 +3σ	2 2 C3	319876	319876 Cobll1	Cobl-like 1
TC0X000023 0.014328	1.91389 RHEB_cKO up vs WT	0.936505 +3σ	X A6 X	434782	434782 Gm5637	predicted pseudogene 5637
TC08000012 0.000668	1.91368 RHEB_cKO up vs WT	0.936347 +3σ	8 D3 8	104394	104394 E2f4	E2F transcription factor 4
TC19000011 0.005224	1.91348 RHEB_cKO up vs WT	0.936196 +3σ	19 A 19	20908	20908 Stx3	syntaxin 3
TC04000025 0.044079	1.91332 RHEB_cKO up vs WT	0.93608 +3σ	4 B1 4	50798	50798 Gne	glucosamine (UDP-N-acetyl)-2-epimerase/N-acetylmannosamine kinase
TC07000003 0.007896	1.91119 RHEB_cKO up vs WT	0.935006 +3σ	6 C1 6	19240	19240 Tmsb10	thymosin, beta 10
TC05000034 0.010686	1.91131 RHEB_cKO up vs WT	0.934565 +3σ	---	---	Got2-ps1	glutamate oxaloacetate transaminase 2, mitochondrial, pseudogene 1
TC14000015 0.012773	1.91087 RHEB_cKO up vs WT	0.93423 +3σ	14 A3 14	11750	11750 Anxa7	annexin A7
TC19000006 0.001105	1.90774 RHEB_cKO up vs WT	0.931863 +3σ	19 A 19	56708	56708 Clcf1	cardiotrophin-like cytokine factor 1
TC09000017 0.021033	1.90739 RHEB_cKO up vs WT	0.931602 +3σ	9 A1 9	83996	83996 Mmp1b	matrix metallopeptidase 1b (interstitial collagenase)
TC0X000006 0.037146	1.90699 RHEB_cKO up vs WT	0.931294 +3σ	X X A5	14266	14266 Aff2	AF4/FMR2 family, member 2
TC09000005 0.03144	1.9068 RHEB_cKO up vs WT	0.931155 +3σ	9 C 9 38.5	12306	12306 Anxa2	annexin A2
TC19000012 0.030736	1.90644 RHEB_cKO up vs WT	0.930878 +3σ	19 B 19 13	16952	16952 Anxa1	annexin A1
TC14000025 0.009354	1.9043 RHEB_cKO up vs WT	0.929258 +3σ	9 A5.1 9 2	15481	15481 Hspa8	heat shock protein 8
TC01000003 0.010418	1.90225 RHEB_cKO up vs WT	0.927704 +3σ	9 A5.1 9 2	15481	15481 Hspa8	heat shock protein 8
TC13000003 0.017518	1.90192 RHEB_cKO up vs WT	0.927457 +3σ	---	---	Gm11395	predicted gene 11395
TC11000021 0.007049	1.9014 RHEB_cKO up vs WT	0.927061 +3σ	11 A1 11	67815	67815 Sec14l2	SEC14-like lipid binding 2
TC01000037 0.015369	1.899 RHEB_cKO up vs WT	0.925239 +3σ	1 H5 1 84.	13800	13800 Enah	enabled homolog (Drosophila)
TC12000005 0.017856	1.89868 RHEB_cKO up vs WT	0.924999 +3σ	12 C1 12	328110	328110 Prpf39	pre-mRNA processing factor 39
TC13000001 0.02079	1.8985 RHEB_cKO up vs WT	0.924862 +3σ	13 A2-A3 1	319183	319183 Hist1h2bj	histone cluster 1, H2bj
TC14000013 0.002876	1.8985 RHEB_cKO up vs WT	0.924861 +3σ	14 E5 14	70572	70572 Ipo5	importin 5
TC18000003 0.015466	1.89691 RHEB_cKO up vs WT	0.92365 +3σ	18 B2 18	67936	67936 Wdr55	WD repeat domain 55
TC16000012 0.003431	1.89509 RHEB_cKO up vs WT	0.922264 +3σ	16 16 B1	66409	66409 Rsl1d1	ribosomal L1 domain containing 1
TC11000017 0.002911	1.89379 RHEB_cKO up vs WT	0.921273 +3σ	---	---	Gm11653	predicted gene 11653
TC18000005 0.035158	1.89314 RHEB_cKO up vs WT	0.920785 +3σ	18 D3 18	20496	20496 Slc12a2	solute carrier family 12, member 2
TC14000026 0.027413	1.89299 RHEB_cKO up vs WT	0.920668 +3σ	14 E2.3 14	24064	24064 Spry2	sprouty homolog 2 (Drosophila)
TC07000024 0.001221	1.89297 RHEB_cKO up vs WT	0.920654 +3σ	7 A3 7	67369	67369 Qpctl	glutaminyl-peptide cyclotransferase-like
TC06000025 0.009087	1.89216 RHEB_cKO up vs WT	0.920034 +3σ	9 A5.1 9 2	15481	15481 Hspa8	heat shock protein 8
TC09000026 0.05602	1.89093 RHEB_cKO up vs WT	0.919099 +3σ	9 D 9	208994	208994 Fam83b	family with sequence similarity 83, member B
TC11000027 0.058156	1.89048 RHEB_cKO up vs WT	0.918752 +3σ	11 B1.3 11	245827	245827 Fat2	FAT atypical cadherin 2
TC						

TC1000001C	0.002878	1.87185 RHEB_cKO up vs WT	0.904463 +3σ	10 C2 10	75089	75089 Uhrf1bp1l UHRF1 (ICBP90) binding protein 1-like
TC13000017	0.046612	1.87165 RHEB_cKO up vs WT	0.904314 +3σ	13 A3.3 1‡	22151	22151 Tubb2a tubulin, beta 2A class IIA
TC16000007	0.007802	1.87035 RHEB_cKO up vs WT	0.90331 +3σ	16 C1.1 1€	28185	28185 Tomm70a translocase of outer mitochondrial membrane 70 homolog A (yeast)
TC16000012	0.04604	1.86977 RHEB_cKO up vs WT	0.902859 +3σ	16 B1 16 1	17217	17217 Mcm4 minichromosome maintenance complex component 4
TC07000001	0.026181	1.86921 RHEB_cKO up vs WT	0.902426 +3σ	---	---	Gm4879 predicted pseudogene 4879
TC03000023	0.011748	1.8676 RHEB_cKO up vs WT	0.901185 +3σ	---	---	Gm9774 predicted pseudogene 9774
TC02000003	0.006226	1.86707 RHEB_cKO up vs WT	0.900776 +3σ	---	---	Gm13422 predicted gene 13422
TC0X00002€	0.008206	1.86626 RHEB_cKO up vs WT	0.900148 +3σ	---	---	Gm14933 predicted gene 14933
TC0700003€	0.00812	1.86601 RHEB_cKO up vs WT	0.899953 +3σ	7 D1 7	83962	83962 Btbd1 BTB (POZ) domain containing 1
TC08000022	0.011043	1.86415 RHEB_cKO up vs WT	0.898522 +3σ	8 8 B3.2	108150	108150 Galnt7 UDP-N-acetyl-alpha-D-galactosamine: polypeptide N-acetylgalactosaminyltran
TC04000013	0.01251	1.86396 RHEB_cKO up vs WT	0.898373 +3σ	---	---	Gm12891 predicted gene 12891
TC1000002€	0.023022	1.86349 RHEB_cKO up vs WT	0.898009 +3σ	---	---	Gm24119 predicted gene, 24119
TC04000024	0.054363	1.86334 RHEB_cKO up vs WT	0.897888 +3σ	---	---	Gm22888 predicted gene, 22888
TC09000021	0.052045	1.86297 RHEB_cKO up vs WT	0.897607 +3σ	9 A5.2 9 2	12402	12402 Cbl Casitas B-lineage lymphoma
TC0300003C	0.117515	1.8628 RHEB_cKO up vs WT	0.897469 +3σ	3 H2 3	229933	229933 Clca2 chloride channel accessory 2
TC02000005	0.04023	1.86275 RHEB_cKO up vs WT	0.897433 +3σ	2 B 2 21.8	11898	11898 Ass1 argininosuccinate synthetase 1
TC10000023	0.003722	1.86211 RHEB_cKO up vs WT	0.896935 +3σ	10 C1 10 3	17319	17319 Mif macrophage migration inhibitory factor
TC05000008	0.339829	1.8621 RHEB_cKO up vs WT	0.896933 +3σ	5 E1 5	13874	13874 Ereg epiregulin
TC1000002C	0.016737	1.86102 RHEB_cKO up vs WT	0.896093 +3σ	10 B1 10	1E+08	1E+08 Amd2 S-adenosylmethionine decarboxylase 2
TC19000005	0.074916	1.86074 RHEB_cKO up vs WT	0.895874 +3σ	19 C2 19	16551	16551 Kif11 kinesin family member 11
TC03000008	0.026223	1.8604 RHEB_cKO up vs WT	0.89561 +3σ	3 3 E-F	20195	20195 S100a11 S100 calcium binding protein A11
TC1100001€	0.01293	1.85871 RHEB_cKO up vs WT	0.894302 +3σ	---	---	Gm11625 predicted gene 11625
TC18000004	0.026411	1.85837 RHEB_cKO up vs WT	0.89404 +3σ	18 B3 18	56070	56070 Tcerg1 transcription elongation regulator 1 (CA150)
TC05000033	0.018425	1.85707 RHEB_cKO up vs WT	0.893032 +3σ	5 G2 5	107939	107939 Pom121 nuclear pore membrane protein 121
TC12000018	0.013851	1.8565 RHEB_cKO up vs WT	0.892582 +3σ	12 12 C3	66244	66244 Nemf nuclear export mediator factor
TC15000005	0.367121	1.85627 RHEB_cKO up vs WT	0.892406 +3σ	15 D3 15	72373	72373 Psca prostate stem cell antigen
TC1100002€	0.031087	1.85437 RHEB_cKO up vs WT	0.890927 +3σ	11 B2 11	20425	20425 Shmt1 serine hydroxymethyltransferase 1 (soluble)
TC12000005	0.067519	1.8541 RHEB_cKO up vs WT	0.89072 +3σ	12 C3 12 3	319565	319565 Syne2 spectrin repeat containing, nuclear envelope 2
TC17000005	0.023516	1.85235 RHEB_cKO up vs WT	0.889354 +3σ	---	---	Gm25447 predicted gene, 25447
TC09000000C	0.004409	1.84978 RHEB_cKO up vs WT	0.887351 +3σ	---	---	Gm10721 predicted gene 10721
TC02000035	0.010198	1.84975 RHEB_cKO up vs WT	0.887332 +3σ	---	---	Gm13552 predicted gene 13552
TC1600002C	0.168799	1.84825 RHEB_cKO up vs WT	0.886158 +3σ	16 C3.3 1€	16699	16699 Krtap13 keratin associated protein 13
TC1000003C	0.007051	1.84793 RHEB_cKO up vs WT	0.885908 +3σ	10 10 D3	73192	73192 Xpot exportin, tRNA (nuclear export receptor for tRNAs)
TC13000023	0.015429	1.84788 RHEB_cKO up vs WT	0.88587 +3σ	13 C1 13 4	69716	69716 Trip13 thyroid hormone receptor interactor 13
TC09000008	0.065716	1.84691 RHEB_cKO up vs WT	0.885116 +3σ	---	---	Gm22455 predicted gene, 22455
TC11000017	0.054184	1.84482 RHEB_cKO up vs WT	0.883483 +3σ	11 E1 11	77097	77097 Tanc2 tetrastricopeptide repeat, ankyrin repeat and coiled-coil containing 2
TC1700001€	0.013513	1.84447 RHEB_cKO up vs WT	0.883389 +3σ	17 A3.3 1‡	52009	52009 Hn1l hematological and neurological expressed 1-like
TC09000001	0.038221	1.84468 RHEB_cKO up vs WT	0.883374 +3σ	9 A3 9 7.6	15894	15894 Icam1 intercellular adhesion molecule 1
TC13000006	0.052016	1.84382 RHEB_cKO up vs WT	0.882695 +3σ	13 B1 13	328258	328258 Slc25a48 solute carrier family 25, member 48
TC14000015	0.004637	1.84377 RHEB_cKO up vs WT	0.882662 +3σ	---	---	Gm21738 predicted gene, 21738
TC04000022	0.06363	1.84366 RHEB_cKO up vs WT	0.882574 +3σ	4 A3 4	70568	70568 Cpne3 copine III
TC13000027	0.065194	1.84261 RHEB_cKO up vs WT	0.881748 +3σ	13 D2.3 1‡	52552	52552 Parp8 poly (ADP-ribose) polymerase family, member 8
TC13000025	4.49E-05	1.84255 RHEB_cKO up vs WT	0.881701 +3σ	13 D1 13	328329	328329 Mast4 microtubule associated serine/threonine kinase family member 4
TC11000032	0.044536	1.84248 RHEB_cKO up vs WT	0.881651 +3σ	11 11	1E+08	1E+08 Snord4a small nucleolar RNA, C/D box 4A
TC09000001	0.030508	1.84223 RHEB_cKO up vs WT	0.881455 +3σ	9 9 A3	75316	75316 Taf1d TATA-box binding protein associated factor, RNA polymerase I, D
TC1100002C	0.002231	1.8408 RHEB_cKO up vs WT	0.880334 +3σ	11 11 A2-›	29856	29856 Smtn smoothelin
TC0500002€	0.013598	1.84015 RHEB_cKO up vs WT	0.879825 +3σ	5 C3.3 5	231327	231327 Ppat phosphoribosyl pyrophosphate amidotransferase
TC09000017	0.004584	1.83896 RHEB_cKO up vs WT	0.878889 +3σ	---	---	Gm16379 predicted pseudogene 16379
TC17000019	0.00459	1.83875 RHEB_cKO up vs WT	0.878722 +3σ	17 17 B3	66973	66973 Mrps18b mitochondrial ribosomal protein S18B
TC02000031	0.00936	1.83864 RHEB_cKO up vs WT	0.878637 +3σ	2 A3 2	67512	67512 Agpat2 1-acylglycerol-3-phosphate O-acyltransferase 2 (lysophosphatidic acid acyltransferase)
TC11000032	0.022031	1.83731 RHEB_cKO up vs WT	0.877599 +3σ	11 B5 11 4	15218	15218 Foxn1 forkhead box N1
TC08000007	0.016195	1.83673 RHEB_cKO up vs WT	0.877143 +3σ	8 B3.3 8 3	17925	17925 Myo9b myosin IXb
TC13000006	0.005905	1.8364 RHEB_cKO up vs WT	0.876881 +3σ	13 13 B2	212880	212880 Ddx46 DEAD (Asp-Glu-Ala-Asp) box polypeptide 46
TC05000035	0.003101	1.83617 RHEB_cKO up vs WT	0.876699 +3σ	5 G2 5 82.	19353	19353 Rac1 RAS-related C3 botulinum substrate 1
TC01000023	0.010051	1.83513 RHEB_cKO up vs WT	0.875884 +3σ	1 C1.2 1	15510	15510 Hspd1 heat shock protein 1 (chaperonin)
TC0500000C	0.127741	1.83491 RHEB_cKO up vs WT	0.875707 +3σ	5 A1 5	20349	20349 Sema3e sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (secreted)
TC11000031	0.00575	1.83435 RHEB_cKO up vs WT	0.875266 +3σ	11 B4 11	276829	276829 Smtnl2 smoothelin-like 2
TC02000013	0.055183	1.83367 RHEB_cKO up vs WT	0.874736 +3σ	---	---	Gm18953 predicted gene, 18953
TC0800001C	0.010133	1.83234 RHEB_cKO up vs WT	0.873687 +3σ	8 C5 8 44.	54352	54352 Irx5 Iroquois related homeobox 5 (Drosophila)
TC18000003	0.006708	1.83102 RHEB_cKO up vs WT	0.872648 +3σ	18 B1 18 1	12385	12385 Ctnna1 catenin (cadherin associated protein), alpha 1
TC01000012	0.006621	1.83052 RHEB_cKO up vs WT	0.872253 +3σ	---	---	Gm4204 predicted gene 4204
TC07000004	0.008135	1.83031 RHEB_cKO up vs WT	0.872091 +3σ	7 A1 7	14113	14113 Fbl fibrillarin
TC08000003	0.002405	1.8303 RHEB_cKO up vs WT	0.872077 +3σ	8 A4-B1 8	13685	13685 Eif4ebp1 eukaryotic translation initiation factor 4E binding protein 1
TC04000018	0.039873	1.83001 RHEB_cKO up vs WT	0.871853 +3σ	---	---	Anp32b-ps Bacidic (leucine-rich) nuclear phosphoprotein 32 family, member B, pseudogene
TC09000001	0.007109	1.82898 RHEB_cKO up vs WT	0.871037 +3σ	9 9 A4	60507	60507 Qrt1 queuine tRNA-ribosyltransferase 1
TC11000033	0.016391	1.82833 RHEB_cKO up vs WT	0.87053 +3σ	11 C 11	237887	237887 Slfn10-ps schlafen 10, pseudogene
TC0700001€	0.010187	1.82743 RHEB_cKO up vs WT	0.869814 +3σ	7 F1 7	233726	233726 Ipo7 importin 7
TC18000002	0.010069	1.82732 RHEB_cKO up vs WT	0.869729 +3σ	18 B1 18	225348	225348 Wdr36 WD repeat domain 36
TC1000001C	0.006137	1				

TC10000011	0.005069	1.81719 RHEB_cKO up vs WT	0.861708 +3σ	10 C3 10	216238	216238 Eea1	early endosome antigen 1
TC03000025	0.025526	1.81623 RHEB_cKO up vs WT	0.860946 +3σ	3 3 F3	19221	19221 Ptgfrn	prostaglandin F2 receptor negative regulator
TC11000006	0.015138	1.81582 RHEB_cKO up vs WT	0.860623 +3σ	11 11 B2	73158	73158 Larp1	La ribonucleoprotein domain family, member 1
TC18000001	0.014244	1.81569 RHEB_cKO up vs WT	0.860515 +3σ	---	---	Gm6457	predicted pseudogene 6457
TC09000006	0.000518	1.81455 RHEB_cKO up vs WT	0.859609 +3σ	9 A5.3 9	73699	73699 Ppp2r1b	protein phosphatase 2, regulatory subunit A, beta
TC02000048	0.002452	1.81327 RHEB_cKO up vs WT	0.858597 +3σ	---	---	Gm14121	predicted gene 14121
TC05000020	0.003813	1.81212 RHEB_cKO up vs WT	0.857681 +3σ	5 5 A3-B	19248	19248 Ptprn12	protein tyrosine phosphatase, non-receptor type 12
TC18000014	0.007809	1.81165 RHEB_cKO up vs WT	0.857308 +3σ	18 E1 18	70223	70223 Nars	asparaginyl-tRNA synthetase
TC09000016	0.004994	1.81142 RHEB_cKO up vs WT	0.857123 +3σ	9 9 A1	67618	67618 Aasdhppt	amino adipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase
TC11000037	0.022131	1.81015 RHEB_cKO up vs WT	0.856105 +3σ	---	---	Gm10039	predicted pseudogene 10039
TC0X000023	0.065608	1.80898 RHEB_cKO up vs WT	0.855175 +3σ	---	---	Gm14681	predicted gene 14681
TC05000013	0.001952	1.80778 RHEB_cKO up vs WT	0.854218 +3σ	5 F 5	231713	231713 Naa25	N(alpha)-acetyltransferase 25, NatB auxiliary subunit
TC10000006	0.006449	1.80744 RHEB_cKO up vs WT	0.85395 +3σ	10 B5.3 10	52696	52696 Zwint	ZW10 interactor
TC15000018	0.025851	1.80629 RHEB_cKO up vs WT	0.85303 +3σ	15 E1 15	1E+08	1E+08 Snord43	small nucleolar RNA, C/D box 43
TC01000024	0.051294	1.80544 RHEB_cKO up vs WT	0.852348 +3σ	1 C2 1	77300	77300 Raph1	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1
TC07000029	0.017794	1.805 RHEB_cKO up vs WT	0.851998 +3σ	7 B3 7	434175	434175 Gm5593	predicted gene 5593
TC14000020	0.00446	1.80458 RHEB_cKO up vs WT	0.851665 +3σ	14 C1 14	27374	27374 Prmt5	protein arginine N-methyltransferase 5
TC08000002	0.064997	1.80279 RHEB_cKO up vs WT	0.850231 +3σ	8 A2 8 11.	20377	20377 Sfrp1	secreted frizzled-related protein 1
TC16000015	0.029124	1.80141 RHEB_cKO up vs WT	0.84913 +3σ	16 B3 16	1E+08	1E+08 BC117090	cDNA sequence BC117090
TC16000020	0.011111	1.8003 RHEB_cKO up vs WT	0.848236 +3σ	16 C3.3 16	207932	207932 Urb1	URB1 ribosome biogenesis 1 homolog (S. cerevisiae)
TC13000007	0.064739	1.80017 RHEB_cKO up vs WT	0.848137 +3σ	---	---	Gm24539	predicted gene, 24539
TC17000006	0.002169	1.80004 RHEB_cKO up vs WT	0.848033 +3σ	17 B1 17 1	114584	114584 Clic1	chloride intracellular channel 1
TC15000014	0.007738	1.79911 RHEB_cKO up vs WT	0.84728 +3σ	15 B3.2 15	67429	67429 Nudcd1	NudC domain containing 1
TC06000014	0.000388	1.79903 RHEB_cKO up vs WT	0.847222 +3σ	6 F3 6 59.	21937	21937 Tnfrsf1a	tumor necrosis factor receptor superfamily, member 1a
TC07000030	0.001923	1.79875 RHEB_cKO up vs WT	0.846996 +3σ	7 B4 7	101612	101612 Grwd1	glutamate-rich WD repeat containing 1
TC15000017	0.077859	1.79866 RHEB_cKO up vs WT	0.846924 +3σ	15 D3 15 :	110454	110454 Ly6a	lymphocyte antigen 6 complex, locus A
TC11000011	0.021378	1.79837 RHEB_cKO up vs WT	0.846691 +3σ	11 B5 11	104662	104662 Tsrl	TSR1 20S rRNA accumulation
TC19000005	0.000741	1.79765 RHEB_cKO up vs WT	0.846111 +3σ	19 A 19	66961	66961 Neat1	nuclear paraspeckle assembly transcript 1 (non-protein coding)
TC16000011	0.007822	1.7974 RHEB_cKO up vs WT	0.845913 +3σ	16 A1 16	52502	52502 Carhsp1	calcium regulated heat stable protein 1
TC17000006	0.004193	1.79732 RHEB_cKO up vs WT	0.845847 +3σ	---	---	Gm8741	predicted gene 8741
TC13000026	0.019198	1.79672 RHEB_cKO up vs WT	0.845369 +3σ	13 D2.2 1:	72198	72198 Skiv2l2	superkiller viralicidic activity 2-like 2 (S. cerevisiae)
TC10000024	0.006534	1.79591 RHEB_cKO up vs WT	0.844717 +3σ	10 C1 10	216161	216161 Sbno2	strawberry notch homolog 2 (Drosophila)
TC08000007	0.015955	1.79491 RHEB_cKO up vs WT	0.84391 +3σ	8 B3.3 8	71780	71780 Isyna1	myo-inositol 1-phosphate synthase A1
TC05000005	0.021242	1.79469 RHEB_cKO up vs WT	0.843732 +3σ	5 E3 5 47:	11745	11745 Anxa3	annexin A3
TC10000025	0.034615	1.79459 RHEB_cKO up vs WT	0.843657 +3σ	10 D2 10	72068	72068 Cnot2	CCR4-NOT transcription complex, subunit 2
TC02000030	0.007396	1.79453 RHEB_cKO up vs WT	0.843605 +3σ	---	---	Gm13316	predicted gene 13316
TC09000031	0.037464	1.79386 RHEB_cKO up vs WT	0.843065 +3σ	9 F3 9 68:	21813	21813 Tgfbr2	transforming growth factor, beta receptor II
TC12000024	0.071881	1.79372 RHEB_cKO up vs WT	0.842954 +3σ	12 F1 12	16450	16450 Jag2	jagged 2
TC03000014	0.002318	1.79368 RHEB_cKO up vs WT	0.84292 +3σ	---	---	Gm2574	predicted pseudogene 2574
TC02000042	0.001672	1.79296 RHEB_cKO up vs WT	0.842344 +3σ	2 E2 2	228413	228413 Prrg4	proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane)
TC15000021	0.005584	1.7926 RHEB_cKO up vs WT	0.842053 +3σ	15 F1 15	22337	22337 Vdr	vitamin D receptor
TC16000007	0.050368	1.79239 RHEB_cKO up vs WT	0.841881 +3σ	---	---	Gm9027	predicted gene 9027
TC18000005	0.100379	1.79175 RHEB_cKO up vs WT	0.84137 +3σ	18 18 A2	19877	19877 Rock1	Rho-associated coiled-coil containing protein kinase 1
TC07000042	0.018475	1.79174 RHEB_cKO up vs WT	0.84136 +3σ	7 F2 7	76179	76179 Usp31	ubiquitin specific peptidase 31
TC0M000000	0.162623	1.79144 RHEB_cKO up vs WT	0.841119 +3σ	---	---	mt-Th	mitochondrially encoded tRNA histidine
TC03000008	0.028051	1.79051 RHEB_cKO up vs WT	0.840374 +3σ	---	---	Gm6097	predicted pseudogene 6097
TC09000033	0.017477	1.79015 RHEB_cKO up vs WT	0.840078 +3σ	9 D 9	225215	225215 Rsl24d1	ribosomal L24 domain containing 1
TC16000014	0.033307	1.78861 RHEB_cKO up vs WT	0.838838 +3σ	16 B2 16	224105	224105 Pak2	p21 protein (Cdc42/Rac)-activated kinase 2
TC11000028	0.019695	1.78853 RHEB_cKO up vs WT	0.838776 +3σ	11 B1.3 11	216766	216766 Gemin5	gem (nuclear organelle) associated protein 5
TC03000014	0.011862	1.78825 RHEB_cKO up vs WT	0.838552 +3σ	3 3 H3	69219	69219 Ddah1	dimethylarginine dimethylaminohydrolase 1
TC01000026	0.00051	1.7867 RHEB_cKO up vs WT	0.837296 +3σ	1 C4 1	23874	23874 Farsb	phenylalanyl-tRNA synthetase, beta subunit
TC14000003	0.00247	1.78662 RHEB_cKO up vs WT	0.837234 +3σ	14 B 14	74427	74427 Eaf1	ELL associated factor 1
TC06000031	0.052928	1.78575 RHEB_cKO up vs WT	0.836528 +3σ	6 F3 6 59:	12527	12527 Cd9	CD9 antigen
TC08000012	0.049123	1.78568 RHEB_cKO up vs WT	0.836475 +3σ	8 D3 8 53.	12560	12560 Cdh3	cadherin 3
TC04000041	0.005014	1.78539 RHEB_cKO up vs WT	0.836237 +3σ	4 D3 4	212632	212632 Iffo2	intermediate filament family orphan 2
TC16000010	0.023592	1.78538 RHEB_cKO up vs WT	0.836227 +3σ	---	---	Gm9242	predicted pseudogene 9242
TC06000007	0.01348	1.78476 RHEB_cKO up vs WT	0.835732 +3σ	6 B3 6	68140	68140 Tigrd2	tigger transposable element derived 2
TC10000010	0.235661	1.78472 RHEB_cKO up vs WT	0.835701 +3σ	10 C1 10	216225	216225 Slc5a8	solute carrier family 5 (iodide transporter), member 8
TC01000022	0.016493	1.78452 RHEB_cKO up vs WT	0.835535 +3σ	1 B 1	72097	72097 2010300C (RIKEN cDNA 2010300C02 gene	
TC11000031	0.001648	1.78434 RHEB_cKO up vs WT	0.835389 +3σ	11 B4 11	18643	18643 Pfn1	profilin 1
TC15000018	0.026674	1.78385 RHEB_cKO up vs WT	0.834997 +3σ	15 E1 15	17886	17886 Myh9	myosin, heavy polypeptide 9, non-muscle
TC08000001	0.009879	1.78327 RHEB_cKO up vs WT	0.834528 +3σ	8 8 A1-A3	21781	21781 Tfdp1	transcription factor Dp 1
TC06000001	0.043802	1.78239 RHEB_cKO up vs WT	0.833809 +3σ	6 A2 6 7.8	17295	17295 Met	met proto-oncogene
TC0X000016	0.002641	1.7823 RHEB_cKO up vs WT	0.83374 +3σ	---	---	Gm16459	predicted gene 16459
TC08000016	0.014214	1.78199 RHEB_cKO up vs WT	0.833489 +3σ	8 8 A1.2	20419	20419 Shcbp1	Shc SH2-domain binding protein 1
TC10000024	0.0039						

TC1600000E	0.028165	1.77051 RHEB_cKO up vs WT	0.824167 +3σ	16 B4 16	72117	72117 Naa50	N(alpha)-acetyltransferase 50, NatE catalytic subunit
TC0500000E	0.010057	1.77051 RHEB_cKO up vs WT	0.824166 +3σ	5 E2 5 47..	52398	52398 Sept11	septin 11
TC0100001E	0.030587	1.77039 RHEB_cKO up vs WT	0.824066 +3σ	1 H6 1	77065	77065 Ints7	integrator complex subunit 7
TC0700004E	0.033852	1.77013 RHEB_cKO up vs WT	0.823859 +3σ	7 F5 7	101772	101772 Ano1	anoctamin 1, calcium activated chloride channel
TC13000001	0.044612	1.76963 RHEB_cKO up vs WT	0.823448 +3σ	13 A3.1 13	1E+08	1E+08 Hist1h4m	histone cluster 1, H4m
TC0800003C	0.011459	1.76941 RHEB_cKO up vs WT	0.823272 +3σ	---	---	---	Gm15899 predicted gene 15899
TC02000017	0.019618	1.76857 RHEB_cKO up vs WT	0.822586 +3σ	2 E5 2	114715	114715 Spred1	sprouty protein with EVH-1 domain 1, related sequence
TC0100000E	0.015251	1.76826 RHEB_cKO up vs WT	0.822329 +3σ	---	---	---	Gm5832 predicted gene 5832
TC08000024	0.02519	1.76811 RHEB_cKO up vs WT	0.822209 +3σ	8 B3.3 8	104370	104370 Snora68	small nucleolar RNA, H/ACA box 68
TC06000031	0.00396	1.76808 RHEB_cKO up vs WT	0.822187 +3σ	---	---	---	Gm4691 predicted gene 4691
TC17000011	0.071089	1.76753 RHEB_cKO up vs WT	0.821736 +3σ	17 17 E3	268977	268977 Ltbp1	latent transforming growth factor beta binding protein 1
TC1600002C	0.014665	1.76682 RHEB_cKO up vs WT	0.821158 +3σ	16 C3-C4 :	14450	14450 Gart	phosphoribosylglycinamide formyltransferase
TC1500000C	0.149515	1.76663 RHEB_cKO up vs WT	0.821001 +3σ	15 A1 15 :	16880	16880 Lifr	leukemia inhibitory factor receptor
TC17000011	0.008853	1.76661 RHEB_cKO up vs WT	0.820985 +3σ	17 E2 17	74196	74196 Ttc27	tetratricopeptide repeat domain 27
TC03000025	0.015699	1.76594 RHEB_cKO up vs WT	0.820439 +3σ	3 F2.2 3	269470	269470 Wdr3	WD repeat domain 3
TC04000021	0.008288	1.76548 RHEB_cKO up vs WT	0.820061 +3σ	4 4 E	21936	21936 Tnfrsf18	tumor necrosis factor receptor superfamily, member 18
TC11000003	0.015103	1.76542 RHEB_cKO up vs WT	0.820011 +3σ	11 A4 11	211347	211347 Pank3	pantothenate kinase 3
TC18000011	0.025555	1.76499 RHEB_cKO up vs WT	0.819656 +3σ	18 C 18 18	15526	15526 Hspa9	heat shock protein 9
TC12000018	0.03292	1.76434 RHEB_cKO up vs WT	0.819128 +3σ	12 C3-D 1:	20663	20663 Sos2	son of sevenless homolog 2 (Drosophila)
TC0900000C	0.001799	1.76389 RHEB_cKO up vs WT	0.818757 +3σ	---	---	---	Gm10715 predicted gene 10715
TC14000001	0.099169	1.76388 RHEB_cKO up vs WT	0.818756 +3σ	14 A3 14 1	18792	18792 Plau	plasminogen activator, urokinase
TC11000023	0.001695	1.76328 RHEB_cKO up vs WT	0.818259 +3σ	---	---	---	Gm12033 predicted gene 12033
TC08000011	0.005062	1.76276 RHEB_cKO up vs WT	0.817838 +3σ	8 D1 8	1E+08	1E+08 Gm15210	inosine 5-phosphate dehydrogenase 2
TC0700003C	0.090161	1.76235 RHEB_cKO up vs WT	0.8175 +3σ	7 B4 7 30.	20208	20208 Saa1	serum amyloid A 1
TC11000024	0.030465	1.76213 RHEB_cKO up vs WT	0.817322 +3σ	11 A4 11	18148	18148 Npm1	nucleophosmin 1
TC02000015	0.004541	1.76213 RHEB_cKO up vs WT	0.817317 +3σ	---	---	---	Gm13882 predicted gene 13882
TC1200000E	0.002352	1.76197 RHEB_cKO up vs WT	0.817188 +3σ	12 12 D3	78920	78920 Dlst	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate con
TC01000032	0.023247	1.76182 RHEB_cKO up vs WT	0.817065 +3σ	1 G3 1 65.	13211	13211 Dhx9	DEAH (Asp-Glu-Ala-His) box polypeptide 9
TC15000012	0.001879	1.76048 RHEB_cKO up vs WT	0.815966 +3σ	15 A1 15 :	110960	110960 Tars	threonyl-tRNA synthetase
TC1200002C	0.00857	1.76001 RHEB_cKO up vs WT	0.81558 +3σ	---	---	---	Gm3695 predicted gene 3695
TC19000017	0.012286	1.75984 RHEB_cKO up vs WT	0.81544 +3σ	19 D3 19	107368	107368 Pdzd8	PDZ domain containing 8
TC03000007	0.019964	1.7596 RHEB_cKO up vs WT	0.815247 +3σ	3 F1 3	229504	229504 Isg20l2	interferon stimulated exonuclease gene 20-like 2
TC14000021	0.007121	1.75944 RHEB_cKO up vs WT	0.815113 +3σ	14 D1 14	71844	71844 Nupl1	nucleoporin like 1
TC16000007	0.044727	1.75859 RHEB_cKO up vs WT	0.814422 +3σ	16 B5 16	224171	224171 C330027C(RIKEN cDNA C330027C09 gene	
TC14000005	0.034457	1.75681 RHEB_cKO up vs WT	0.812962 +3σ	14 D1 14	14714	14714 Gnrh1	gonadotropin releasing hormone 1
TC10000025	0.014673	1.75639 RHEB_cKO up vs WT	0.812611 +3σ	10 D2 10	12461	12461 Cct2	chaperonin containing Tcp1, subunit 2 (beta)
TC04000016	0.029479	1.75385 RHEB_cKO up vs WT	0.810524 +3σ	4 D3-E 4 6	20544	20544 Slc9a1	solute carrier family 9 (sodium/hydrogen exchanger), member 1
TC13000021	0.098284	1.75313 RHEB_cKO up vs WT	0.809932 +3σ	---	---	---	Gm24095 predicted gene, 24095
TC04000037	0.018657	1.75255 RHEB_cKO up vs WT	0.809452 +3σ	4 D3 4	100017	100017 Ldlrap1	low density lipoprotein receptor adaptor protein 1
TC11000017	0.010809	1.75109 RHEB_cKO up vs WT	0.80825 +3σ	---	---	---	Gm11652 predicted gene 11652
TC0100000C	0.023269	1.75084 RHEB_cKO up vs WT	0.808051 +3σ	---	---	---	Gm6161 predicted gene 6161
TC0700003E	0.020823	1.7508 RHEB_cKO up vs WT	0.808016 +3σ	7 D3 7 45.	29875	29875 Iggap1	IQ motif containing GTPase activating protein 1
TC10000005	0.031643	1.75059 RHEB_cKO up vs WT	0.807838 +3σ	---	---	---	Gm7399 predicted gene 7399
TC0X000021	0.031111	1.75031 RHEB_cKO up vs WT	0.807612 +3σ	X A5 X	72065	72065 Rap2c	RAP2C, member of RAS oncogene family
TC01000038	0.005442	1.75031 RHEB_cKO up vs WT	0.807611 +3σ	1 H6 1 97.	54139	54139 Irf6	interferon regulatory factor 6
TC17000011	0.052532	1.75011 RHEB_cKO up vs WT	0.807446 +3σ	17 17	1E+08	1E+08 Snord53	small nucleolar RNA, C/D box 53
TC0200004E	0.481809	1.7499 RHEB_cKO up vs WT	0.807276 +3σ	6 6 59.32	1.01E+08	1.01E+08 Mir3098	microRNA 3098
TC1200000E	0.060475	1.74948 RHEB_cKO up vs WT	0.806928 +3σ	12 D2 12	108156	108156 Mthfd1	methenyltetrahydrofolate dehydrogenase (NADP+ dependent), methenyltetrahydrofolate dehydrogenase, pseudogene 15
TC0Y000001	0.000742	1.74915 RHEB_cKO up vs WT	0.806658 +3σ	Y Y	1E+08	1E+08 Gapdh-ps1glyceraldehyde-3-phosphate dehydrogenase, pseudogene 15	
TC16000005	0.000449	1.74907 RHEB_cKO up vs WT	0.806585 +3σ	16 B3 16	433016	433016 Gm5483	predicted gene 5483
TC0300002E	0.004244	1.74836 RHEB_cKO up vs WT	0.806 +3σ	3 3 F3	53975	53975 Ddx20	DEAD (Asp-Glu-Ala-Asp) box polypeptide 20
TC09000013	0.004578	1.74833 RHEB_cKO up vs WT	0.805974 +3σ	9 F1-F2 9 :	15586	15586 Hyal1	hyaluronoglucosaminidase 1
TC11000042	0.007643	1.74675 RHEB_cKO up vs WT	0.804675 +3σ	11 E2 11	20973	20973 Syngr2	synaptogyrin 2
TC08000021	0.008541	1.7466 RHEB_cKO up vs WT	0.804549 +3σ	---	---	---	Gm10313 predicted pseudogene 10313
TC05000024	0.006279	1.74658 RHEB_cKO up vs WT	0.804531 +3σ	5 C1 5	666377	666377 Gm8069	predicted pseudogene 8069
TC0500000C	9.38E-05	1.74652 RHEB_cKO up vs WT	0.804487 +3σ	---	---	---	Tubb4b-ps tubulin, beta 4B class IVB, pseudogene 1
TC09000032	0.006398	1.74643 RHEB_cKO up vs WT	0.804407 +3σ	9 F3 9	108737	108737 Oxsrl	oxidative-stress responsive 1
TC01000006	0.021279	1.74617 RHEB_cKO up vs WT	0.804195 +3σ	1 C4 1 40.	195434	195434 Utp14b	UTP14B small subunit processome component
TC05000019	0.019266	1.74565 RHEB_cKO up vs WT	0.803767 +3σ	---	---	---	Gm8991 predicted pseudogene 8991
TC12000023	0.011631	1.74552 RHEB_cKO up vs WT	0.80366 +3σ	12 F1 12 6	15519	15519 Hsp90aa1	heat shock protein 90, alpha (cytosolic), class A member 1
TC19000004	0.031111	1.74522 RHEB_cKO up vs WT	0.803405 +3σ	19 C1 19	59028	59028 Rcl1	RNA terminal phosphate cyclase-like 1
TC0X00002C	0.005547	1.74504 RHEB_cKO up vs WT	0.803257 +3σ	X A3.3 X	77286	77286 Nkrf	NF-kappaB repressing factor
TC12000023	0.192822	1.74473 RHEB_cKO up vs WT	0.803004 +3σ	12 12 59.1	1.01E+08	1.01E+08 Gm19576	predicted gene, 19576
TC07000024	0.064932	1.74432 RHEB_cKO up vs WT	0.802662 +3σ	7 A2 7 8.6	259300	259300 Ehd2	EH-domain containing 2
TC14000013	0.018939	1.74379 RHEB_cKO up vs WT	0.802227 +3σ	---	---	---</	

TC09000023	0.029087	1.7315 RHEB_cKO up vs WT	0.792021 +3σ	9 A5.3 9	77591	77591 Ddx10	DEAD (Asp-Glu-Ala-Asp) box polypeptide 10
TC03000012	0.007727	1.73126 RHEB_cKO up vs WT	0.791826 +3σ	3 G1-G2 3	108058	108058 Camk2d	calcium/calmodulin-dependent protein kinase II, delta
TC0500002C	0.00407	1.73122 RHEB_cKO up vs WT	0.79179 +3σ	5 A3 5 10.	20817	20817 Srpk2	serine/arginine-rich protein specific kinase 2
TC15000002	0.004817	1.73118 RHEB_cKO up vs WT	0.791752 +3σ	15 15 B3.3	67724	67724 Pop1	processing of precursor 1, ribonuclease P/MRP family, (S. cerevisiae)
TC0700002C	0.00011	1.73051 RHEB_cKO up vs WT	0.791194 +3σ	7 F5 7	56460	56460 Pkp3	plakophilin 3
TC1500001E	0.060001	1.73015 RHEB_cKO up vs WT	0.7909 +3σ	15 D2 15	17988	17988 Ndrg1	N-myc downstream regulated gene 1
TC17000004	0.012425	1.72957 RHEB_cKO up vs WT	0.790415 +3σ	---	---	---	Gm16580 predicted gene 16580
TC1300001C	0.022238	1.72952 RHEB_cKO up vs WT	0.790372 +3σ	13 D1 13	68018	68018 Col4a3bp	collagen, type IV, alpha 3 (Goodpasture antigen) binding protein
TC1800001C	0.040502	1.72864 RHEB_cKO up vs WT	0.789633 +3σ	---	---	---	Gm7665 predicted pseudogene 7665
TC17000001	0.016058	1.72677 RHEB_cKO up vs WT	0.788077 +3σ	17 17	1E+08	1E+08 Snora20	small nucleolar RNA, H/ACA box 20
TC1000000C	0.004372	1.72656 RHEB_cKO up vs WT	0.7879 +3σ	10 A1 10	270685	270685 Mthfd1l	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like
TC11000001	0.01274	1.72515 RHEB_cKO up vs WT	0.786721 +3σ	11 A1-A4	13649	13649 Egfr	epidermal growth factor receptor
TC01000022	0.007971	1.72503 RHEB_cKO up vs WT	0.786624 +3σ	1 B 1	14200	14200 Fhl2	four and a half LIM domains 2
TC0700003E	0.007173	1.72495 RHEB_cKO up vs WT	0.786551 +3σ	---	---	---	Gm3200 predicted pseudogene 3200
TC1300000C	0.007919	1.72436 RHEB_cKO up vs WT	0.78606 +3σ	13 A1 13	69617	69617 Pitrm1	pitrilysin metalloendopeptidase 1
TC15000023	0.034275	1.72372 RHEB_cKO up vs WT	0.785527 +3σ	---	1.02E+08	1.02E+08 Mir6963	microRNA 6963
TC0800001C	0.00341	1.72365 RHEB_cKO up vs WT	0.785463 +3σ	8 C3 8	257632	257632 Nod2	nucleotide-binding oligomerization domain containing 2
TC15000014	0.002622	1.72352 RHEB_cKO up vs WT	0.785362 +3σ	15 B3.1 15	70790	70790 Ubr5	ubiquitin protein ligase E3 component n-recognition 5
TC11000039	0.002687	1.72346 RHEB_cKO up vs WT	0.785304 +3σ	11 E1 11	16647	16647 Kpna2	karyopherin (importin) alpha 2
TC19000002	0.039796	1.72204 RHEB_cKO up vs WT	0.784115 +3σ	19 A 19	225929	225929 Patl1	protein associated with topoisomerase II homolog 1 (yeast)
TC03000019	0.016905	1.72109 RHEB_cKO up vs WT	0.78332 +3σ	---	---	---	Gm10254 predicted gene 10254
TC01000005	0.008977	1.72088 RHEB_cKO up vs WT	0.783147 +3σ	---	---	---	Gm15659 predicted gene 15659
TC09000005	0.003702	1.72082 RHEB_cKO up vs WT	0.783096 +3σ	---	1.01E+08	1.01E+08 LOC100867 NHP2-like protein 1	
TC04000011	0.002367	1.72027 RHEB_cKO up vs WT	0.782639 +3σ	4 C7 4	16975	16975 Lrp8	low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
TC03000029	0.019507	1.72015 RHEB_cKO up vs WT	0.782532 +3σ	3 G3 3	99683	99683 Sec24b	Sec24 related gene family, member B (S. cerevisiae)
TC09000013	0.008785	1.7201 RHEB_cKO up vs WT	0.782491 +3σ	9 F1 9 59.1	19882	19882 Mst1r	macrophage stimulating 1 receptor (c-met-related tyrosine kinase)
TC15000013	0.005076	1.71997 RHEB_cKO up vs WT	0.782385 +3σ	15 15 C	18458	18458 Pabpc1	poly(A) binding protein, cytoplasmic 1
TC11000029	0.005028	1.71958 RHEB_cKO up vs WT	0.782056 +3σ	---	---	---	Gm12286 predicted gene 12286
TC19000003	0.024303	1.71958 RHEB_cKO up vs WT	0.782053 +3σ	19 B 19	83921	83921 Tmem2	transmembrane protein 2
TC04000015	0.011962	1.71909 RHEB_cKO up vs WT	0.781641 +3σ	4 D2.2-D2.	80912	80912 Pum1	pumilio RNA-binding family member 1
TC17000002	0.015349	1.71889 RHEB_cKO up vs WT	0.781474 +3σ	17 A3.2 17	22710	22710 Zfp52	zinc finger protein 52
TC07000011	0.079156	1.71847 RHEB_cKO up vs WT	0.781127 +3σ	7 D3 7	18584	18584 Pde8a	phosphodiesterase 8A
TC05000015	0.00571	1.71795 RHEB_cKO up vs WT	0.780684 +3σ	5 G1.3 5	12466	12466 Cct6a	chaperonin containing Tcp1, subunit 6a (zeta)
TC17000016	0.045184	1.71764 RHEB_cKO up vs WT	0.780426 +3σ	17 A3.3 17	1E+08	1E+08 Snora78	small nucleolar RNA, H/ACA box 7
TC02000037	0.001342	1.71562 RHEB_cKO up vs WT	0.778727 +3σ	---	---	---	Gm13642 predicted gene 13642
TC09000001	0.038058	1.71534 RHEB_cKO up vs WT	0.778495 +3σ	---	---	---	Gm23455 predicted gene, 23455
TC13000025	0.00429	1.71504 RHEB_cKO up vs WT	0.778242 +3σ	---	---	---	Gm2445 predicted gene 2445
TC16000016	0.008062	1.71493 RHEB_cKO up vs WT	0.778149 +3σ	16 A1 16	17470	17470 Cd200	CD200 antigen
TC01000033	0.004096	1.71336 RHEB_cKO up vs WT	0.777032 +3σ	1 1 H1	12301	12301 Cacybp	calcyclin binding protein
TC16000009	0.153897	1.71352 RHEB_cKO up vs WT	0.776962 +3σ	16 C3.3 16	117172	117172 2310034C RIKEN cDNA 2310034C09 gene	
TC1100000C	0.0349	1.71302 RHEB_cKO up vs WT	0.776545 +3σ	11 A1 11	74522	74522 Morc2a	microchordia 2A
TC0100003C	0.01575	1.71292 RHEB_cKO up vs WT	0.776459 +3σ	1 E4 1	226419	226419 Dyrk3	dual-specific tyrosine-(Y)-phosphorylation regulated kinase 3
TC06000025	0.002264	1.71268 RHEB_cKO up vs WT	0.776254 +3σ	---	---	---	Gm5138 predicted gene 5138
TC04000008	0.003543	1.71186 RHEB_cKO up vs WT	0.775566 +3σ	---	---	---	Gm12416 predicted gene 12416
TC02000017	0.023389	1.71151 RHEB_cKO up vs WT	0.775274 +3σ	2 E5 2	1E+08	1E+08 Inafm2	Inaf motif containing 2
TC10000017	0.010287	1.71149 RHEB_cKO up vs WT	0.775255 +3σ	---	---	---	Gm8330 predicted gene 8330
TC10000024	0.000194	1.71123 RHEB_cKO up vs WT	0.775032 +3σ	10 C1 10	70294	70294 Rnf126	ring finger protein 126
TC07000015	0.00997	1.71046 RHEB_cKO up vs WT	0.774387 +3σ	7 F3 7 74.1	12237	12237 Bub3	BUB3 mitotic checkpoint protein
TC08000018	0.012864	1.70999 RHEB_cKO up vs WT	0.773992 +3σ	8 A1.3 8	244334	244334 Defb8	defensin beta 8
TC05000015	0.064282	1.70961 RHEB_cKO up vs WT	0.773671 +3σ	5 A3 5 8.1	14677	14677 Gnai1	guanine nucleotide binding protein (G protein), alpha inhibiting 1
TC17000025	0.001674	1.70782 RHEB_cKO up vs WT	0.772157 +3σ	17 E3 17	668830	668830 Gm9386	predicted pseudogene 9386
TC18000005	0.012226	1.7076 RHEB_cKO up vs WT	0.771967 +3σ	---	---	---	Gm5507 predicted gene 5507
TC0X000018	0.04753	1.70732 RHEB_cKO up vs WT	0.771734 +3σ	X A1.1 X 8	12361	12361 Cask	calcium/calmodulin-dependent serine protein kinase (MAGUK family)
TC04000002	0.003407	1.70711 RHEB_cKO up vs WT	0.771557 +3σ	---	---	---	Gm11912 predicted gene 11912
TC14000005	0.030595	1.70683 RHEB_cKO up vs WT	0.771318 +3σ	14 C1 14	218975	218975 Mapk1ip1l	mitogen-activated protein kinase 1 interacting protein 1-like
TC03000032	0.009849	1.70539 RHEB_cKO up vs WT	0.770099 +3σ	3 F2.2 3	70465	70465 Wdr77	WD repeat domain 77
TC07000008	0.005705	1.70535 RHEB_cKO up vs WT	0.770071 +3σ	7 B4 7 29.	211548	211548 Nomo1	nodal modulator 1
TC12000025	0.016663	1.70496 RHEB_cKO up vs WT	0.769742 +3σ	12 A1.2 11	211914	211914 Asap2	ArfGAP with SH3 domain, ankyrin repeat and PH domain 2
TC15000017	0.008213	1.70485 RHEB_cKO up vs WT	0.769643 +3σ	15 D3 15	17068	17068 Ly6d	lymphocyte antigen 6 complex, locus D
TC05000019	0.031196	1.70447 RHEB_cKO up vs WT	0.769327 +3σ	---	---	---	Gm7332 predicted gene 7332
TC17000026	0.021238	1.70429 RHEB_cKO up vs WT	0.769167 +3σ	17 E4 17	72416	72416 Lrpprc	leucine-rich PPR-motif containing
TC18000014	0.003732	1.70402 RHEB_cKO up vs WT	0.769097 +3σ	18 18 D3	17714	17714 Grpel2	GrpE-like 2, mitochondrial
TC10000022	0.112755	1.70326 RHEB_cKO up vs WT	0.768295 +3σ	10 10	1E+08	1E+08 Snord98	small nucleolar RNA, C/D box 98
TC10000027	0.058766	1.7023 RHEB_cKO up vs WT	0.767487 +3σ	10 10	71207	71207 Nudt4	nudix (nucleoside diphosphate linked moiety X)-type motif 4
TC06000016	0.034799	1.7023 RHEB_cKO up vs WT	0.767482 +3σ	---	---	---	Gm20400 predicted gene 20400
TC01000013	0						

TC01000005	0.06866	1.69228 RHEB_cKO up vs WT	0.758965 +3σ	---	---	---	Gm26457	predicted gene, 26457
TC0X000003	0.003435	1.69189 RHEB_cKO up vs WT	0.758633 +3σ	X A4 X 21.	11740	11740 Slc25a5	solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocato	
TC13000027	0.119202	1.69182 RHEB_cKO up vs WT	0.758576 +3σ	13 D2.2 13	14313	14313 Fst	follistatin	
TC08000008	0.007143	1.69178 RHEB_cKO up vs WT	0.758545 +3σ	---	---	---	Gm7984	predicted gene 7984
TC1800001C	0.00393	1.6916 RHEB_cKO up vs WT	0.758387 +3σ	18 A2 18	106957	106957 Slc39a6	solute carrier family 39 (metal ion transporter), member 6	
TC0300002E	0.002701	1.6904 RHEB_cKO up vs WT	0.757365 +3σ	3 3 F3	15257	15257 Hipk1	homeodomain interacting protein kinase 1	
TC15000004	0.015014	1.69017 RHEB_cKO up vs WT	0.757172 +3σ	15 D1 15	76740	76740 Efr3a	EFR3 homolog A	
TC03000004	0.027065	1.68986 RHEB_cKO up vs WT	0.756901 +3σ	3 E1 3	74012	74012 Rap2b	RAP2B, member of RAS oncogene family	
TC14000004	0.018571	1.68952 RHEB_cKO up vs WT	0.756613 +3σ	---	---	---	Gm7324	predicted gene 7324
TC09000008	0.10063	1.68918 RHEB_cKO up vs WT	0.756325 +3σ	---	---	---	Gm23136	predicted gene, 23136
TC01000031	0.101195	1.68872 RHEB_cKO up vs WT	0.755932 +3σ	1 E4 1	329252	329252 Lgr6	leucine-rich repeat-containing G protein-coupled receptor 6	
TC02000021	0.064496	1.68864 RHEB_cKO up vs WT	0.755865 +3σ	2 2 H1	24128	24128 Xrn2	5'-3' exoribonuclease 2	
TC1500002C	0.036646	1.68798 RHEB_cKO up vs WT	0.755294 +3σ	15 E3 15	105847	105847 Lmf2	lipase maturation factor 2	
TC02000047	0.014327	1.68796 RHEB_cKO up vs WT	0.75528 +3σ	2 2 G3	66580	66580 Esf1	ESF1 nucleolar pre-rRNA processing protein homolog	
TC1700001E	0.033865	1.68773 RHEB_cKO up vs WT	0.755082 +3σ	6 6 B1	68011	68011 Snrpg	small nuclear ribonucleoprotein polypeptide G	
TC0200003E	0.006966	1.68691 RHEB_cKO up vs WT	0.754387 +3σ	2 2 C3	56878	56878 Rbms1	RNA binding motif, single stranded interacting protein 1	
TC0400003C	0.001092	1.6866 RHEB_cKO up vs WT	0.754118 +3σ	---	---	---	Gm12671	predicted gene 12671
TC03000012	0.015913	1.68657 RHEB_cKO up vs WT	0.75409 +3σ	3 G1 3	99480	99480 Dnttip2	deoxyribonucleotidyltransferase, terminal, interacting protein 2	
TC02000048	0.000457	1.68649 RHEB_cKO up vs WT	0.754021 +3σ	2 G3 2 73.	21824	21824 Thbd	thrombomodulin	
TC02000047	0.002105	1.68635 RHEB_cKO up vs WT	0.753908 +3σ	---	---	---	Gm14111	predicted gene 14111
TC07000004	0.012584	1.68623 RHEB_cKO up vs WT	0.753801 +3σ	7 A3 7 13.	21803	21803 Tgfb1	transforming growth factor, beta 1	
TC1100001C	0.032688	1.68599 RHEB_cKO up vs WT	0.753595 +3σ	11 B4 11	246788	246788 Trpv3	transient receptor potential cation channel, subfamily V, member 3	
TC16000012	0.006211	1.68573 RHEB_cKO up vs WT	0.753372 +3σ	16 A1 16	106205	106205 Zc3h7a	zinc finger CCCH type containing 7 A	
TC08000002	0.019315	1.68511 RHEB_cKO up vs WT	0.752845 +3σ	8 A2 8 11.	20516	20516 Slc20a2	solute carrier family 20, member 2	
TC13000001	0.028986	1.68421 RHEB_cKO up vs WT	0.75207 +3σ	13 A2-A3 :	319191	319191 Hist1h2ai	histone cluster 1, H2ai	
TC16000019	0.004132	1.68405 RHEB_cKO up vs WT	0.751938 +3σ	16 C3.3 16	12469	12469 Cct8	chaperonin containing Tcp1, subunit 8 (theta)	
TC0100002E	0.003468	1.68309 RHEB_cKO up vs WT	0.751109 +3σ	---	---	---	Gm5529	predicted pseudogene 5529
TC01000002	0.031118	1.68306 RHEB_cKO up vs WT	0.751091 +3σ	1 B 1	50785	50785 Hs6st1	heparan sulfate 6-O-sulfotransferase 1	
TC04000017	0.03569	1.68267 RHEB_cKO up vs WT	0.750753 +3σ	4 D3 4 69.	15530	15530 Hspg2	perlecan (heparan sulfate proteoglycan 2)	
TC0900000C	0.004625	1.68247 RHEB_cKO up vs WT	0.750578 +3σ	9 9 A1-A2	17386	17386 Mmp13	matrix metallopeptidase 13	
TC0300002C	0.000331	1.68213 RHEB_cKO up vs WT	0.750286 +3σ	3 D 3 28.6	20439	20439 Siah2	seven in absentia 2	
TC05000034	0.01899	1.68201 RHEB_cKO up vs WT	0.750183 +3σ	---	---	---	Gm15502	predicted gene 15502
TC01000037	0.011478	1.68194 RHEB_cKO up vs WT	0.750127 +3σ	1 H6 1	226844	226844 Mfsd7b	major facilitator superfamily domain containing 7B	
TC01000035	0.004426	1.68176 RHEB_cKO up vs WT	0.74997 +3σ	1 1 80.65	1.01E+08	1.01E+08 Gm16340	interferon-activatable protein 203-like	
TC13000027	0.001413	1.68174 RHEB_cKO up vs WT	0.749958 +3σ	13 13	72465	72465 Zfp131	zinc finger protein 131	
TC03000007	0.005667	1.68133 RHEB_cKO up vs WT	0.749599 +3σ	3 F1 3	66614	66614 Gpatch4	G patch domain containing 4	
TC0500001C	0.04368	1.68117 RHEB_cKO up vs WT	0.749465 +3σ	5 E5 5	433926	433926 Lrrc8b	leucine rich repeat containing 8 family, member B	
TC0800003C	0.004253	1.68104 RHEB_cKO up vs WT	0.749357 +3σ	8 E1 8 71.	11821	11821 Aprt	adenine phosphoribosyl transferase	
TC03000024	0.010116	1.681 RHEB_cKO up vs WT	0.74932 +3σ	3 F1-F2 3	319176	319176 Hist2h2ac	histone cluster 2, H2ac	
TC1200001E	0.322836	1.68037 RHEB_cKO up vs WT	0.748776 +3σ	12 B1 12	380755	380755 Lsmem1	leucine-rich single-pass membrane protein 1	
TC0X000017	0.260775	1.68011 RHEB_cKO up vs WT	0.748552 +3σ	---	---	---	Gm21887	predicted gene, 21887
TC0100002E	0.023889	1.68005 RHEB_cKO up vs WT	0.748503 +3σ	1 C1.1 1 2	14660	14660 Gls	glutaminase	
TC19000015	0.002016	1.67985 RHEB_cKO up vs WT	0.748334 +3σ	19 19 D1	66583	66583 Exosc1	exosome component 1	
TC17000021	0.004187	1.6797 RHEB_cKO up vs WT	0.748201 +3σ	17 C 17	20807	20807 Srf	serum response factor	
TC02000052	0.096307	1.67958 RHEB_cKO up vs WT	0.748097 +3σ	2 H3 2 95.	12162	12162 Bmp7	bone morphogenetic protein 7	
TC1900001E	0.010328	1.67922 RHEB_cKO up vs WT	0.747788 +3σ	19 D2 19	1E+08	1E+08 Nutf2-ps1	nuclear transport factor 2, pseudogene 1	
TC13000015	0.04714	1.67905 RHEB_cKO up vs WT	0.747646 +3σ	13 A2-A3 :	319185	319185 Hist1h2bl	histone cluster 1, H2bl	
TC04000024	0.029822	1.6789 RHEB_cKO up vs WT	0.747512 +3σ	4 A5 4 20.	14595	14595 B4galt1	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	
TC04000004	0.499126	1.67736 RHEB_cKO up vs WT	0.746188 +3σ	4 A5 4	1E+08	1E+08 Gm2163	predicted gene 2163	
TC02000025	0.016259	1.67713 RHEB_cKO up vs WT	0.745998 +3σ	2 H3 2 87.	110750	110750 Cse1l	chromosome segregation 1-like (S. cerevisiae)	
TC05000024	0.00031	1.67676 RHEB_cKO up vs WT	0.74568 +3σ	5 C3.1 5	212285	212285 Arap2	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 2	
TC1400000C	0.028517	1.67671 RHEB_cKO up vs WT	0.745629 +3σ	14 A1 14	66082	66082 Abhd6	abhydrolase domain containing 6	
TC15000004	0.019933	1.6763 RHEB_cKO up vs WT	0.74528 +3σ	15 D1 15	239463	239463 Fam83a	family with sequence similarity 83, member A	
TC01000019	0.0094	1.6761 RHEB_cKO up vs WT	0.745109 +3σ	1 A3 1	433273	433273 Gm5523	glyceraldehyde-3-phosphate dehydrogenase pseudogene	
TC19000005	0.01252	1.67589 RHEB_cKO up vs WT	0.744927 +3σ	19 C2 19	74493	74493 Tnks2	tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2	
TC16000005	0.0216	1.67587 RHEB_cKO up vs WT	0.744912 +3σ	16 C3.3 16	12013	12013 Bach1	BTB and CNC homology 1, basic leucine zipper transcription factor 1	
TC08000015	0.008975	1.67578 RHEB_cKO up vs WT	0.744831 +3σ	8 E2 8	382038	382038 Urb2	URB2 ribosome biogenesis 2 homolog (S. cerevisiae)	
TC0700000C	0.011486	1.67542 RHEB_cKO up vs WT	0.744527 +3σ	7 A1 7 2.7	19943	19943 Rpl28	ribosomal protein L28	
TC09000013	0.066716	1.675 RHEB_cKO up vs WT	0.744162 +3σ	9 F1 9	235559	235559 Topbp1	topoisomerase (DNA) II binding protein 1	
TC0200005C	0.002015	1.67423 RHEB_cKO up vs WT	0.743496 +3σ	---	---	---	Gm11451	predicted gene 11451
TC16000004	0.019532	1.67413 RHEB_cKO up vs WT	0.743409 +3σ	16 B3 16	66667	66667 Hspbp1	Hspb associated protein 1	
TC11000012	0.011142	1.67401 RHEB_cKO up vs WT	0.743305 +3σ	11 11 B5	78394	78394 Ddx52	DEAD (Asp-Glu-Ala-Asp) box polypeptide 52	
TC1500001E	0.005458	1.67393 RHEB_cKO up vs WT	0.74324 +3σ	15 D3 15	239528	239528 Ago2	argonaute RISC catalytic subunit 2	
TC17000013	0.00086	1.67311 RHEB_cKO up vs WT	0.742532 +3σ	17 A1 17	22350	22350 Ezr	ezrin	
TC14								

TC13000024	0.02399	1.66538 RHEB_cKO up vs WT	0.735847 +3σ	13 D1 13	105372	105372 Utp15	UTP15 small subunit processome component
TC16000012	0.013088	1.6643 RHEB_cKO up vs WT	0.734912 +3σ	16 A3 16 1	94112	94112 Med15	mediator complex subunit 15
TC04000021	0.009556	1.66399 RHEB_cKO up vs WT	0.734645 +3σ	4 E2 4	57741	57741 Noc2l	NOC2 like nucleolar associated transcriptional repressor
TC0200004C	0.040721	1.66295 RHEB_cKO up vs WT	0.733746 +3σ	---	---	Gm13767	predicted gene 13767
TC0800002C	0.032691	1.66208 RHEB_cKO up vs WT	0.732992 +3σ	---	---	Gm10131	predicted pseudogene 10131
TC09000022	0.005452	1.66175 RHEB_cKO up vs WT	0.73237 +3σ	---	---	Gm7286	predicted gene 7286
TC1500001ε	0.009551	1.66159 RHEB_cKO up vs WT	0.732564 +3σ	15 D1 15	223601	223601 Fam49b	family with sequence similarity 49, member B
TC15000001	0.001239	1.66102 RHEB_cKO up vs WT	0.732067 +3σ	---	---	Gm2606	predicted pseudogene 2606
TC08000001	0.007246	1.66079 RHEB_cKO up vs WT	0.731866 +3σ	8 A1.3 8	654452	654452 Defa-ps12	defensin, alpha, pseudogene 12
TC0800003C	0.003359	1.65997 RHEB_cKO up vs WT	0.731157 +3σ	8 E1 8	68533	68533 Mphosph6	M phase phosphoprotein 6
TC01000027	0.030174	1.65986 RHEB_cKO up vs WT	0.73106 +3σ	1 1	1E+08	1E+08 Snora75	small nucleolar RNA, H/ACA box 75
TC0200004E	0.008596	1.65969 RHEB_cKO up vs WT	0.730911 +3σ	---	---	Gm14108	predicted gene 14108
TCOX00002E	0.006438	1.6596 RHEB_cKO up vs WT	0.730832 +3σ	---	---	Gm5944	predicted gene 5944
TCOX000024	0.035284	1.65956 RHEB_cKO up vs WT	0.730804 +3σ	X C1 X 37.	15161	15161 Hcfc1	host cell factor C1
TC08000004	0.015034	1.65951 RHEB_cKO up vs WT	0.730402 +3σ	8 A4 8 21.	52065	52065 Mfhas1	malignant fibrous histiocytoma amplified sequence 1
TC15000021	0.018522	1.65894 RHEB_cKO up vs WT	0.730258 +3σ	15 F1 15 5	19082	19082 Prkag1	protein kinase, AMP-activated, gamma 1 non-catalytic subunit
TC13000027	0.014116	1.65877 RHEB_cKO up vs WT	0.730111 +3σ	13 C1 13 3	28114	28114 Nsun2	NOL1/NOP2/Sun domain family member 2
TC0100000C	0.002587	1.65876 RHEB_cKO up vs WT	0.730105 +3σ	---	---	Gm2383	predicted gene 2383
TC01000014	0.051093	1.65867 RHEB_cKO up vs WT	0.730027 +3σ	1 H2.1 1	14455	14455 Gas5	growth arrest specific 5
TC02000022	0.00557	1.65814 RHEB_cKO up vs WT	0.729568 +3σ	---	---	Gm14130	predicted gene 14130
TC03000017	0.08134	1.65739 RHEB_cKO up vs WT	0.728913 +3σ	3 3 B	13605	13605 Ect2	ect2 oncogene
TCOX000007	0.068517	1.65734 RHEB_cKO up vs WT	0.728871 +3σ	---	---	Gm8503	predicted gene 8503
TC17000023	0.002964	1.65726 RHEB_cKO up vs WT	0.728797 +3σ	---	---	Gm4518	predicted gene 4518
TC16000021	0.019184	1.65671 RHEB_cKO up vs WT	0.728319 +3σ	16 C4 16	72388	72388 Ripk4	receptor-interacting serine-threonine kinase 4
TC13000011	0.005206	1.65664 RHEB_cKO up vs WT	0.728261 +3σ	13 D1 13	218506	218506 Mrps27	mitochondrial ribosomal protein S27
TC07000024	0.004131	1.65663 RHEB_cKO up vs WT	0.728249 +3σ	7 A3 7	22323	22323 Vasp	vasodilator-stimulated phosphoprotein
TC09000014	0.055588	1.65641 RHEB_cKO up vs WT	0.728061 +3σ	9 F2 9 59.:	12530	12530 Cdc25a	cell division cycle 25A
TC1300002E	0.034417	1.65628 RHEB_cKO up vs WT	0.727943 +3σ	13 D2.1 13	67263	67263 Zswim6	zinc finger SWIM-type containing 6
TC09000023	0.005159	1.65553 RHEB_cKO up vs WT	0.727293 +3σ	9 9 C	56434	56434 Tspan3	tetraspanin 3
TC11000005	0.066022	1.65498 RHEB_cKO up vs WT	0.726814 +3σ	11 B1.2 11	14584	14584 Gfpt2	glutamine fructose-6-phosphate transaminase 2
TC10000015	0.001715	1.65435 RHEB_cKO up vs WT	0.726261 +3σ	---	---	Gm10327	predicted pseudogene 10327
TC1100001C	0.007219	1.65434 RHEB_cKO up vs WT	0.726254 +3σ	11 B4 11	74148	74148 Cluh	clustered mitochondria (cluA/CLU1) homolog
TC0200004E	0.026384	1.65384 RHEB_cKO up vs WT	0.725282 +3σ	2 F1 2	215387	215387 Ncaph	non-SMC condensin I complex, subunit H
TC09000031	0.002165	1.6538 RHEB_cKO up vs WT	0.725788 +3σ	9 F2 9	104831	104831 Ptpn23	protein tyrosine phosphatase, non-receptor type 23
TC15000005	0.008293	1.65272 RHEB_cKO up vs WT	0.724842 +3σ	---	---	Gm4335	predicted gene 4335
TC1200001C	0.021708	1.6522 RHEB_cKO up vs WT	0.724386 +3σ	12 12 F1	18789	18789 Papola	poly (A) polymerase alpha
TC0700004E	0.002807	1.65132 RHEB_cKO up vs WT	0.723618 +3σ	7 A3 7	233033	233033 Samd4b	sterile alpha motif domain containing 4B
TC09000002	0.058601	1.65128 RHEB_cKO up vs WT	0.723588 +3σ	9 A4 9	78658	78658 Ncapd3	non-SMC condensin II complex, subunit D3
TC0200002S	0.026465	1.65087 RHEB_cKO up vs WT	0.72323 +3σ	---	---	Gm13294	predicted gene 13294
TC07000005	0.041889	1.65004 RHEB_cKO up vs WT	0.722498 +3σ	---	---	Gm7551	predicted gene 7551
TC03000008	0.000177	1.64999 RHEB_cKO up vs WT	0.722456 +3σ	---	---	Gm4202	predicted gene 4202
TC0700004E	0.028814	1.64984 RHEB_cKO up vs WT	0.722233 +3σ	7 F3 7 65.:	18817	18817 Plk1	polo-like kinase 1
TC11000022	0.005784	1.6496 RHEB_cKO up vs WT	0.722113 +3σ	---	---	Gm12017	predicted gene 12017
TC17000006	0.016755	1.64933 RHEB_cKO up vs WT	0.72188 +3σ	17 B1 17	57390	57390 Psors1c2	psoriasis susceptibility 1 candidate 2 (human)
TC01000017	0.031875	1.64871 RHEB_cKO up vs WT	0.721339 +3σ	1 1	108909	108909 Aida	axin interactor, dorsalization associated
TC0900002F	0.003598	1.64817 RHEB_cKO up vs WT	0.720866 +3σ	---	---	Gm3671	predicted gene 3671
TC0100001E	0.005502	1.64817 RHEB_cKO up vs WT	0.720865 +3σ	1 1 H3	78825	78825 Desi2	desumoylating isopeptidase 2
TC1200002C	0.003572	1.64765 RHEB_cKO up vs WT	0.720412 +3σ	12 D1 12	67963	67963 Npc2	Niemann-Pick type C2
TC14000011	0.028049	1.64747 RHEB_cKO up vs WT	0.720251 +3σ	14 D3 14	13709	13709 Elf1	E74-like factor 1
TCOX000017	0.035403	1.64737 RHEB_cKO up vs WT	0.720164 +3σ	X A2-A3.1	18824	18824 Plp2	proteolipid protein 2
TC02000003	0.081827	1.64678 RHEB_cKO up vs WT	0.719649 +3σ	---	---	Gm13378	predicted gene 13378
TCOX000015	0.020281	1.64678 RHEB_cKO up vs WT	0.719644 +3σ	---	---	Amd-ps1	S-adenosylmethionine decarboxylase, pseudogene 1
TC04000008	0.033073	1.64653 RHEB_cKO up vs WT	0.719425 +3σ	---	---	Gm12418	predicted gene 12418
TC03000006	0.006415	1.64633 RHEB_cKO up vs WT	0.719253 +3σ	---	---	Gm10291	predicted pseudogene 10291
TC06000017	0.013957	1.64611 RHEB_cKO up vs WT	0.719056 +3σ	6 G3 6	71323	71323 Rassf8	Ras association (RalGDS/AF-6) domain family (N-terminal) member 8
TC19000013	0.010915	1.64584 RHEB_cKO up vs WT	0.718823 +3σ	19 19 C3	67979	67979 Atad1	ATPase family, AAA domain containing 1
TC03000007	0.015006	1.64552 RHEB_cKO up vs WT	0.718544 +3σ	3 F1 3	94232	94232 Ubqln4	ubiquilin 4
TC0200003E	0.002356	1.64519 RHEB_cKO up vs WT	0.718254 +3σ	2 2 C3	14425	14425 Galnt3	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltran:
TC0100003E	0.003261	1.64393 RHEB_cKO up vs WT	0.717149 +3σ	1 H6 1	226849	226849 Ppp2r5a	protein phosphatase 2, regulatory subunit B', alpha
TC17000013	0.002979	1.64367 RHEB_cKO up vs WT	0.716924 +3σ	17 E4 17	56468	56468 Soc5	suppressor of cytokine signaling 5
TC03000031	0.016152	1.64319 RHEB_cKO up vs WT	0.716165 +3σ	3 H3 3 78.	19352	19352 Rabggtb	Rab geranylgeranyl transferase, b subunit
TC10000032	0.003443	1.64295 RHEB_cKO up vs WT	0.716291 +3σ	10 C1 10	103466	103466 Nt5dc3	5'-nucleotidase domain containing 3
TC13000015	0.012354	1.64287 RHEB_cKO up vs WT	0.716221 +3σ	13 A2-A3 :	319158	319158 Hist1h4i	histone cluster 1, H4i
TCOX000018	0.061436	1.6425 RHEB_cKO up vs WT	0.715892 +3σ	X A1.1 X	26896	26896 Med14	mediator complex subunit 14
TC02000052	0.023826	1.64249 RHEB_cKO up vs WT	0.715888 +3σ	2 H3 2 89.	228913	228913 Zfp217	zinc finger protein 217
TC1100001C	0.065739	1.64249 RHEB_cKO up vs WT	0.715886 +3σ	11 B5 11 4	192159	192159 Prpf8	pre-mRNA processing factor 8
TC01000019	0.00297	1.64246 RHEB_cKO up vs WT	0.715856 +3σ				

TC06000034	0.008008	1.63594 RHEB_cKO up vs WT	0.710124 +3σ	6 G2 6 77.	16653	16653 Kras	Kirsten rat sarcoma viral oncogene homolog
TC0200004€	0.062938	1.63558 RHEB_cKO up vs WT	0.709801 +3σ	2 F 2 62.9	16176	16176 Il1b	interleukin 1 beta
TC07000012	0.072712	1.6353 RHEB_cKO up vs WT	0.709552 +3σ	7 7 D3-E1.	13032	13032 Ctsc	cathepsin C
TC08000032	0.005921	1.6349 RHEB_cKO up vs WT	0.709201 +3σ	8 E1 8	22224	22224 Usp10	ubiquitin specific peptidase 10
TC19000011	0.015116	1.63482 RHEB_cKO up vs WT	0.709134 +3σ	19 B 19 7.	108673	108673 Ccdc86	coiled-coil domain containing 86
TC0200002€	0.009434	1.6348 RHEB_cKO up vs WT	0.709111 +3σ	2 H4 2 97.	19334	19334 Rab22a	RAB22A, member RAS oncogene family
TC11000004	0.02247	1.63478 RHEB_cKO up vs WT	0.709092 +3σ	11 B1.2 11	14694	14694 Rack1	receptor for activated C kinase 1
TC12000014	0.003797	1.63451 RHEB_cKO up vs WT	0.708862 +3σ	12 A1.3 12	434693	434693 Mrto4-ps2	mRNA turnover 4, pseudogene 2
TC0300000C	0.008462	1.63436 RHEB_cKO up vs WT	0.708722 +3σ	3 A1-A3 3	16592	16592 Fabp5	fatty acid binding protein 5, epidermal
TC09000021	0.045406	1.63413 RHEB_cKO up vs WT	0.70852 +3σ	9 A5.2 9 2	12402	12402 Cbl	Casitas B-lineage lymphoma
TC16000003	0.08468	1.63397 RHEB_cKO up vs WT	0.708384 +3σ	16 B1 16 1	22061	22061 Trp63	transformation related protein 63
TC08000027	0.00306	1.63378 RHEB_cKO up vs WT	0.708213 +3σ	8 D1 8 47.	14719	14719 Got2	glutamatic-oxaloacetic transaminase 2, mitochondrial
TC02000045	0.018019	1.63369 RHEB_cKO up vs WT	0.708133 +3σ	2 F1 2 61.	73338	73338 Itprpl1	inositol 1,4,5-triphosphate receptor interacting protein-like 1
TC12000008	0.023045	1.63309 RHEB_cKO up vs WT	0.707608 +3σ	---	---	Gm2075	predicted gene 2075
TC03000015	0.079325	1.63265 RHEB_cKO up vs WT	0.707211 +3σ	3 H3 3 77.	51886	51886 Fubp1	far upstream element (FUSE) binding protein 1
TC02000022	0.003978	1.63247 RHEB_cKO up vs WT	0.707056 +3σ	---	---	Gm14148	predicted gene 14148
TC13000019	0.016656	1.6323 RHEB_cKO up vs WT	0.706905 +3σ	13 A5 13	218210	218210 Nup153	nucleoporin 153
TC15000021	0.019561	1.63209 RHEB_cKO up vs WT	0.706719 +3σ	15 15 F2	69612	69612 Kansl2	KAT8 regulatory NSL complex subunit 2
TC05000019	0.00173	1.63169 RHEB_cKO up vs WT	0.706366 +3σ	---	---	Gm10481	predicted gene 10481
TC12000014	0.002651	1.63147 RHEB_cKO up vs WT	0.706177 +3σ	---	---	Gm4929	predicted gene 4929
TC13000015	0.009334	1.63126 RHEB_cKO up vs WT	0.705989 +3σ	13 A2-A3 1	319167	319167 Hist1h2ag	histone cluster 1, H2ag
TC0X000023	0.058643	1.6308 RHEB_cKO up vs WT	0.705583 +3σ	X A6 X	671878	671878 Gm14680	predicted gene 14680
TC06000025	0.003147	1.63058 RHEB_cKO up vs WT	0.705386 +3σ	6 6 F	58186	58186 Rad18	RAD18 E3 ubiquitin protein ligase
TC12000010	0.061734	1.63052 RHEB_cKO up vs WT	0.705336 +3σ	---	---	Gm17052	predicted gene 17052
TC1200000C	0.002248	1.63046 RHEB_cKO up vs WT	0.70528 +3σ	12 A1.1 12	626534	626534 Gm6682	tubulin, alpha 1C pseudogene
TC17000011	0.026136	1.6304 RHEB_cKO up vs WT	0.705225 +3σ	17 E3 17	12211	12211 Birc6	baculoviral IAP repeat-containing 6
TC0X000025	0.008164	1.63014 RHEB_cKO up vs WT	0.704995 +3σ	---	---	Gm8822	predicted gene 8822
TC0400001€	0.076149	1.63006 RHEB_cKO up vs WT	0.704923 +3σ	4 D2.3 4	100342	100342 Fam46b	family with sequence similarity 46, member B
TC10000007	0.001937	1.62998 RHEB_cKO up vs WT	0.704855 +3σ	10 C1 10 3	20509	20509 Slc19a1	solute carrier family 19 (folate transporter), member 1
TC01000018	0.001037	1.62904 RHEB_cKO up vs WT	0.704021 +3σ	1 H6 1	226856	226856 Lpgat1	lysophosphatidylglycerol acyltransferase 1
TC0X00000E	0.002142	1.62852 RHEB_cKO up vs WT	0.703564 +3σ	---	---	Gm14777	predicted gene 14777
TC02000041	0.003349	1.62837 RHEB_cKO up vs WT	0.703429 +3σ	---	---	Gm13810	predicted gene 13810
TC17000002	0.010883	1.62835 RHEB_cKO up vs WT	0.703409 +3σ	17 17	387248	387248 Mirlet7e	microRNA let7e
TC13000019	0.010193	1.62827 RHEB_cKO up vs WT	0.703338 +3σ	---	---	Gm7251	predicted pseudogene 7251
TC03000027	0.136671	1.62825 RHEB_cKO up vs WT	0.703324 +3σ	3 F2.3 3	229700	229700 Rbm15	RNA binding motif protein 15
TC08000031	0.000903	1.62806 RHEB_cKO up vs WT	0.703156 +3σ	8 E2 8	244668	244668 Sipa1l2	signal-induced proliferation-associated 1 like 2
TC11000041	0.063128	1.62789 RHEB_cKO up vs WT	0.703007 +3σ	11 E2 11 8	20382	20382 Srsf2	serine/arginine-rich splicing factor 2
TC03000005	0.005966	1.62773 RHEB_cKO up vs WT	0.702953 +3σ	---	---	Gm5139	predicted gene 5139
TC0X000021	0.04868	1.62781 RHEB_cKO up vs WT	0.702931 +3σ	---	---	Gm7803	predicted gene 7803
TC0X000018	0.00223	1.62772 RHEB_cKO up vs WT	0.702856 +3σ	---	---	Gm7129	predicted gene 7129
TC15000014	0.000109	1.62746 RHEB_cKO up vs WT	0.702623 +3σ	15 B3.1 15	21847	21847 Klf10	Kruppel-like factor 10
TC07000039	0.016198	1.62735 RHEB_cKO up vs WT	0.702526 +3σ	---	---	Gm16464	predicted gene 16464
TC17000001	0.003946	1.62624 RHEB_cKO up vs WT	0.70154 +3σ	---	---	Gm3222	predicted pseudogene 3222
TC01000011	0.049415	1.62545 RHEB_cKO up vs WT	0.700843 +3σ	1 E4 1	226412	226412 R3hdm1	R3H domain containing 1
TC19000012	0.00416	1.62498 RHEB_cKO up vs WT	0.700418 +3σ	---	---	Gm8825	predicted gene 8825
TC1400002€	0.030022	1.62468 RHEB_cKO up vs WT	0.700158 +3σ	14 C2 14 2	114741	114741 Supt16	suppressor of Ty 16
TC08000005	0.065868	1.62449 RHEB_cKO up vs WT	0.699985 +3σ	8 C3 8	330814	330814 Adgrl1	adhesion G protein-coupled receptor L1
TC03000005	0.020137	1.62423 RHEB_cKO up vs WT	0.699816 +3σ	---	---	Gm20657	predicted gene 20657
TC04000025	0.013464	1.62315 RHEB_cKO up vs WT	0.69888 +3σ	---	---	Gm12444	predicted gene 12444
TC08000012	0.03292	1.62297 RHEB_cKO up vs WT	0.698638 +3σ	8 8 D2	66164	66164 Nip7	NIP7, nucleolar pre-rRNA processing protein
TC02000049	0.00019	1.62286 RHEB_cKO up vs WT	0.698538 +3σ	2 H1 2	16418	16418 Eif6	eukaryotic translation initiation factor 6
TC04000034	0.002235	1.62217 RHEB_cKO up vs WT	0.697928 +3σ	4 4 D1	12331	12331 Cap1	CAP, adenylate cyclase-associated protein 1 (yeast)
TC12000001	0.024147	1.62212 RHEB_cKO up vs WT	0.69788 +3σ	---	---	Gm22748	predicted gene 22748
TC01000002	0.008007	1.62194 RHEB_cKO up vs WT	0.697718 +3σ	1 B 1	26921	26921 Map4k4	mitogen-activated protein kinase kinase kinase kinase 4
TC11000005	0.003295	1.62113 RHEB_cKO up vs WT	0.696999 +3σ	11 B1.3 11	19052	19052 Ppp2ca	protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform
TC18000014	0.002324	1.62059 RHEB_cKO up vs WT	0.696516 +3σ	18 E1 18 3	11555	11555 Adrb2	adrenergic receptor, beta 2
TC04000029	0.035545	1.62047 RHEB_cKO up vs WT	0.696417 +3σ	4 C3 4	101739	101739 Psip1	PC4 and SFRS1 interacting protein 1
TC05000016	0.00458	1.62045 RHEB_cKO up vs WT	0.696396 +3σ	5 G2 5	433956	433956 Dnaaf5	dynein, axonemal assembly factor 5
TC01000029	0.005842	1.62042 RHEB_cKO up vs WT	0.696365 +3σ	1 1 E2	64143	64143 Ralb	v-ral simian leukemia viral oncogene B
TC12000012	0.163429	1.61902 RHEB_cKO up vs WT	0.695117 +3σ	12 12	387199	387199 Mir203	microRNA 203
TC03000020	0.005778	1.61898 RHEB_cKO up vs WT	0.695085 +3σ	---	---	Gm8177	predicted gene 8177
TC01000022	0.046562	1.61887 RHEB_cKO up vs WT	0.694989 +3σ	1 C1.1 1	227059	227059 Slc39a10	solute carrier family 39 (zinc transporter), member 10
TC14000009	0.071357	1.61843 RHEB_cKO up vs WT	0.694599 +3σ	14 D1 14 3	210925	210925 Ints9	integrator complex subunit 9
TC10000016	0.015494	1.6183 RHEB_cKO up vs WT	0.694476 +3σ	10 10 C1	66118	66118 Sarnp	SAP domain containing ribonucleoprotein
TC01000038	0.0044502	1.61822 RHEB_cKO up vs WT	0.694403 +3σ	1 C1 1	75623	75623 Tex30	testis expressed 30
TC04000027	0.001555	1.61817 RHEB_cKO up vs WT	0.694363 +3σ	---	---	Gm12537	predicted gene 12537
TC07000003	0.015054	1.6					

TC05000002	0.037592	1.61116 RHEB_cKO up vs WT	0.688101 +3σ	5 B1 5 15.	433864	433864 Nom1	nucleolar protein with MIF4G domain 1
TC0X000027	0.07448	1.61099 RHEB_cKO up vs WT	0.687951 +3σ	---	---	Gm9103	predicted gene 9103
TC15000014	0.009041	1.61044 RHEB_cKO up vs WT	0.687453 +3σ	15 15 C	54375	54375 Azin1	antizyme inhibitor 1
TC04000027	0.063884	1.61031 RHEB_cKO up vs WT	0.687336 +3σ	4 4 C1	54366	54366 Ctnna1	catenin (cadherin associated protein), alpha-like 1
TC05000029	0.014148	1.61015 RHEB_cKO up vs WT	0.687193 +3σ	---	---	Rps19-ps8	ribosomal protein S19, pseudogene 8
TC0200004C	0.065388	1.60988 RHEB_cKO up vs WT	0.686954 +3σ	2 E1-2 2 5	19271	19271 Ptprj	protein tyrosine phosphatase, receptor type, J
TC03000012	0.041557	1.60973 RHEB_cKO up vs WT	0.686822 +3σ	3 3 G3	29815	29815 Bcar3	breast cancer anti-estrogen resistance 3
TC0400002E	0.017961	1.60963 RHEB_cKO up vs WT	0.686725 +3σ	4 B1 4	269536	269536 Tex10	testis expressed gene 10
TC13000018	0.001334	1.60946 RHEB_cKO up vs WT	0.686577 +3σ	13 A3.3 13	105245	105245 Txndc5	thioredoxin domain containing 5
TC0700002E	0.001187	1.60938 RHEB_cKO up vs WT	0.686504 +3σ	7 A3 7	233011	233011 Itpkc	inositol 1,4,5-trisphosphate 3-kinase C
TC16000001	0.012364	1.60905 RHEB_cKO up vs WT	0.686206 +3σ	16 A1 16	67203	67203 Nde1	nudE neurodevelopment protein 1
TC14000011	0.123518	1.60888 RHEB_cKO up vs WT	0.686058 +3σ	14 E2.2 14	12224	12224 Klf5	Kruppel-like factor 5
TC1700001E	0.002306	1.60869 RHEB_cKO up vs WT	0.685884 +3σ	17 A3.3 17	213773	213773 Tbl3	transducin (beta)-like 3
TC1600001C	0.002224	1.60838 RHEB_cKO up vs WT	0.685609 +3σ	16 C4 16	338467	338467 Morc3	microrchidia 3
TC0200004S	0.010902	1.60794 RHEB_cKO up vs WT	0.685209 +3σ	2 H1 2 76.	269378	269378 Ahcy	S-adenosylhomocysteine hydrolase
TC05000029	0.000981	1.60757 RHEB_cKO up vs WT	0.684877 +3σ	---	---	Gm10359	predicted gene 10359
TC0800002C	0.003533	1.60745 RHEB_cKO up vs WT	0.684772 +3σ	---	---	Gm5787	predicted gene 5787
TC13000017	0.007995	1.60737 RHEB_cKO up vs WT	0.684704 +3σ	13 13 A3.3	13557	13557 E2f3	E2F transcription factor 3
TC13000025	0.000022	1.60732 RHEB_cKO up vs WT	0.68466 +3σ	13 D1 13	621312	621312 Gm6211	predicted gene 6211
TC01000018	0.013234	1.60716 RHEB_cKO up vs WT	0.684513 +3σ	---	---	Gm3809	predicted gene 3809
TC07000013	0.063114	1.60692 RHEB_cKO up vs WT	0.684296 +3σ	---	---	Gm24412	predicted gene, 24412
TC05000022	0.012244	1.60677 RHEB_cKO up vs WT	0.684166 +3σ	5 B2 5	24116	24116 Nelfa	negative elongation factor complex member A, Whsc2
TC11000013	0.075717	1.60668 RHEB_cKO up vs WT	0.684078 +3σ	11 C 11 52	110809	110809 Srsf1	serine/arginine-rich splicing factor 1
TC11000016	0.094468	1.60634 RHEB_cKO up vs WT	0.683779 +3σ	---	---	Gm11585	predicted gene 11585
TC08000021	0.000757	1.60622 RHEB_cKO up vs WT	0.683666 +3σ	---	---	Gm2193	predicted gene 2193
TCOM00000	0.230049	1.60593 RHEB_cKO up vs WT	0.683407 +3σ	---	---	mt-Tn	mitochondrially encoded tRNA asparagine
TC0700001E	0.012979	1.60573 RHEB_cKO up vs WT	0.683233 +3σ	7 F1 7	53322	53322 Nucb2	nucleobindin 2
TC16000003	0.003244	1.60562 RHEB_cKO up vs WT	0.68313 +3σ	---	---	Gm5809	predicted pseudogene 5809
TC06000024	0.04466	1.60537 RHEB_cKO up vs WT	0.682906 +3σ	6 C1 6	69956	69956 Ptcld3	pentatricopeptide repeat domain 3
TC1100002E	0.00952	1.60525 RHEB_cKO up vs WT	0.682799 +3σ	---	---	Gm12182	predicted gene 12182
TC19000012	0.034409	1.60488 RHEB_cKO up vs WT	0.682461 +3σ	19 A 19 1C	107272	107272 Psat1	phosphoserine aminotransferase 1
TC0300001C	0.004344	1.60465 RHEB_cKO up vs WT	0.682258 +3σ	3 F2.2 3	329727	329727 Dennd2c	DENN/MADD domain containing 2C
TC15000017	0.01167	1.60425 RHEB_cKO up vs WT	0.681903 +3σ	15 D3 15	105732	105732 Fam83h	family with sequence similarity 83, member H
TC09000008	0.094725	1.60419 RHEB_cKO up vs WT	0.681846 +3σ	---	---	Gm23344	predicted gene, 23344
TC16000001	0.009689	1.60408 RHEB_cKO up vs WT	0.681746 +3σ	16 A2 16	70120	70120 Yars2	tyrosyl-tRNA synthetase 2 (mitochondrial)
TC02000023	0.004327	1.60404 RHEB_cKO up vs WT	0.681707 +3σ	---	---	Gm14240	predicted gene 14240
TC04000032	0.009872	1.60399 RHEB_cKO up vs WT	0.681667 +3σ	---	---	Gm12749	predicted gene 12749
TC10000024	0.011823	1.60328 RHEB_cKO up vs WT	0.68103 +3σ	10 C1 10 3	110816	110816 Pwp2	PWP2 periodic tryptophan protein homolog (yeast)
TSUnmappe	0.239832	1.60327 RHEB_cKO up vs WT	0.681022 +3σ	10 B1 10	19850	19850 Rnu3a	U3A small nuclear RNA
TC12000024	0.000414	1.60312 RHEB_cKO up vs WT	0.680887 +3σ	12 F1 12 6	217866	217866 Cdc42bpb	CDC42 binding protein kinase beta
TC0100002C	0.050759	1.60286 RHEB_cKO up vs WT	0.680651 +3σ	1 1 A3-A5	17215	17215 Mcm3	minichromosome maintenance complex component 3
TC11000037	0.013818	1.60268 RHEB_cKO up vs WT	0.680409 +3σ	11 D 11 6:	20848	20848 Stat3	signal transducer and activator of transcription 3
TC16000016	0.021047	1.60248 RHEB_cKO up vs WT	0.680306 +3σ	16 B4 16	106248	106248 Qtrtd1	queueine tRNA-ribosyltransferase domain containing 1
TC03000011	0.00312	1.60219 RHEB_cKO up vs WT	0.680048 +3σ	3 F3 3	26442	26442 Psma5	proteasome (prosome, macropain) subunit, alpha type 5
TC03000027	0.117268	1.60202 RHEB_cKO up vs WT	0.679891 +3σ	3 F3 3	76123	76123 Gpsm2	G-protein signalling modulator 2 (AGS3-like, C. elegans)
TC19000007	0.04836	1.60138 RHEB_cKO up vs WT	0.679316 +3σ	19 D2 19	13006	13006 Smc3	structural maintenance of chromosomes 3
TC14000024	0.073549	-1.61384 RHEB_cKO down vs WT	-0.6905 -3σ	14 D3 14	380916	380916 Lrch1	leucine-rich repeats and calponin homology (CH) domain containing 1
TC0800003C	0.029497	-1.61399 RHEB_cKO down vs WT	-0.69063 -3σ	8 E1 8	192156	192156 Mvd	mevalonate (diphospho) decarboxylase
TC11000028	0.035105	-1.61512 RHEB_cKO down vs WT	-0.69171 -3σ	11 B1.3 11	14923	14923 Guk1	guanylate kinase 1
TC12000011	0.370411	-1.61524 RHEB_cKO down vs WT	-0.69175 -3σ	12 E-F1 12	13386	13386 Dlk1	delta-like 1 homolog (Drosophila)
TC01000013	0.055432	-1.61557 RHEB_cKO down vs WT	-0.69204 -3σ	1 G3 1	226518	226518 Nmnat2	nicotinamide nucleotide adenylyltransferase 2
TC10000003	0.002015	-1.61588 RHEB_cKO down vs WT	-0.69232 -3σ	10 B2 10 2	140742	140742 Sesn1	sestrin 1
TC07000045	0.051006	-1.61631 RHEB_cKO down vs WT	-0.69271 -3σ	---	---	Gm10153	predicted gene 10153
TC01000038	0.063514	-1.61775 RHEB_cKO down vs WT	-0.69399 -3σ	1 H3 1 80.	15951	15951 Ifi204	interferon activated gene 204
TC14000019	0.00507	-1.6184 RHEB_cKO down vs WT	-0.69457 -3σ	---	---	Gm6055	predicted gene 6055
TC1400002C	0.225342	-1.61851 RHEB_cKO down vs WT	-0.69467 -3σ	14 C1 14	11731	11731 Ang2	angiogenin, ribonuclease A family, member 2
TC13000017	0.142573	-1.61859 RHEB_cKO down vs WT	-0.69473 -3σ	13 A3.3 13	73102	73102 Slc22a23	solute carrier family 22, member 23
TC10000022	0.011594	-1.61869 RHEB_cKO down vs WT	-0.69483 -3σ	10 B4 10	70423	70423 Tspan15	tetraspanin 15
TC16000017	0.064455	-1.62017 RHEB_cKO down vs WT	-0.69614 -3σ	16 C1.1 16	56277	56277 Tmem45a	transmembrane protein 45a
TC11000029	0.007431	-1.62046 RHEB_cKO down vs WT	-0.69641 -3σ	11 B2 11 3	11671	11671 Aldh3a2	aldehyde dehydrogenase family 3, subfamily A2
TC06000033	0.002597	-1.62071 RHEB_cKO down vs WT	-0.69663 -3σ	6 G2 6 74.	16832	16832 Ldhb	lactate dehydrogenase B
TC11000031	0.281554	-1.621 RHEB_cKO down vs WT	-0.69689 -3σ	11 B4 11	216892	216892 Spns2	spinster homolog 2
TC1000000C	0.028249	-1.62111 RHEB_cKO down vs WT	-0.69698 -3σ	10 A2 10 4	22634	22634 Plagl1	pleiomorphic adenoma gene-like 1
TC17000028	0.006803	-1.62113 RHEB_cKO down vs WT	-0.697 -3σ	17 B1 17 1	15024	15024 H2-T10	histocompatibility 2, T region locus 10
TC11000012	0.000996	-1.62141 RHEB_cKO down vs WT	-0.69725 -3σ	11 B5 11 5	16882	16882 Lig3	ligase III, DNA, ATP-dependent
TC19000004	0.242978	-1.62149 RHEB_cKO down vs WT	-0.69732 -3σ				

TC16000004	0.00122	-1.63462	RHEB_cKO down vs WT	-0.70896 -3σ	16 B3 16 :	13026	13026 Pcyt1a	phosphate cytidylyltransferase 1, choline, alpha isoform
TC02000002	0.004004	-1.63496	RHEB_cKO down vs WT	-0.70926 -3σ	2 2 11.87 :	1.01E+08	1.01E+08 Gm20038	predicted gene, 20038
TC10000008	0.089908	-1.63595	RHEB_cKO down vs WT	-0.71013 -3σ	10 C1 10 :	50492	50492 Thop1	thimet oligopeptidase 1
TC17000027	0.057688	-1.63657	RHEB_cKO down vs WT	-0.71068 -3σ	17 B1 17 :	14961	14961 H2-Ab1	histocompatibility 2, class II antigen A, beta 1
TC12000007	0.058247	-1.63674	RHEB_cKO down vs WT	-0.71082 -3σ	12 C3 12	69522	69522 2310002D RIKEN cDNA 2310002D06 gene	
TC01000035	0.156048	-1.63675	RHEB_cKO down vs WT	-0.71084 -3σ	1 H3 1 79:	14127	14127 Fcer1g	Fc receptor, IgE, high affinity I, gamma polypeptide
TC1100004C	0.028163	-1.637	RHEB_cKO down vs WT	-0.71106 -3σ	11 E2 11	328035	328035 Fads6	fatty acid desaturase domain family, member 6
TC08000002	0.102759	-1.63711	RHEB_cKO down vs WT	-0.71115 -3σ	8 8 A3	56229	56229 Thsd1	thrombospondin, type I, domain 1
TC04000016	0.01538	-1.63789	RHEB_cKO down vs WT	-0.71184 -3σ	4 D3 4 68:	15356	15356 Hmgcl	3-hydroxy-3-methylglutaryl-Coenzyme A lyase
TC07000004	0.016614	-1.63877	RHEB_cKO down vs WT	-0.71261 -3σ	7 A3 7 14:	13094	13094 Cyp2b9	cytochrome P450, family 2, subfamily b, polypeptide 9
TC19000009	0.03167	-1.63935	RHEB_cKO down vs WT	-0.71312 -3σ	19 A 19	75221	75221 Dpp3	dipeptidylpeptidase 3
TC18000004	0.301399	-1.63986	RHEB_cKO down vs WT	-0.71357 -3σ	18 B3 18	433178	433178 Spink14	serine peptidase inhibitor, Kazal type 14
TC15000018	0.007718	-1.64056	RHEB_cKO down vs WT	-0.71419 -3σ	15 E1 15 :	52609	52609 Cbx7	chromobox 7
TC13000012	0.014417	-1.64246	RHEB_cKO down vs WT	-0.71586 -3σ	13 D2.2 13:	77318	77318 Ankrd55	ankyrin repeat domain 55
TC06000013	0.33486	-1.64265	RHEB_cKO down vs WT	-0.71603 -3σ	6 F1 6	50530	50530 Mfap5	microfibrillar associated protein 5
TC12000024	0.032987	-1.64299	RHEB_cKO down vs WT	-0.71633 -3σ	12 12 F2	21981	21981 Ppp1r13b	protein phosphatase 1, regulatory (inhibitor) subunit 13B
TC07000003	0.043396	-1.64373	RHEB_cKO down vs WT	-0.71697 -3σ	7 A3 7	1E+08	1E+08 Gm4598	predicted gene 4598
TC05000022	0.013485	-1.64522	RHEB_cKO down vs WT	-0.71828 -3σ	5 5 B2	17160	17160 Man2b2	mannosidase 2, alpha B2
TC13000014	0.000327	-1.64581	RHEB_cKO down vs WT	-0.7188 -3σ	13 A1 13 :	83924	83924 Gpr137b	G protein-coupled receptor 137B
TC09000017	0.103869	-1.64617	RHEB_cKO down vs WT	-0.71911 -3σ	9 9 A3	71946	71946 Endod1	endonuclease domain containing 1
TC14000007	0.041287	-1.64725	RHEB_cKO down vs WT	-0.72006 -3σ	---	---	---	Traj14
TC01000012	0.139041	-1.64782	RHEB_cKO down vs WT	-0.72056 -3σ	1 F 1	329260	329260 Dennd1b	DENN/MADD domain containing 1B
TC02000006	0.000215	-1.64932	RHEB_cKO down vs WT	-0.72187 -3σ	2 B 2 23.5	227753	227753 Gsn	gelsolin
TC19000003	0.114229	-1.64976	RHEB_cKO down vs WT	-0.72226 -3σ	19 A-B 19	14675	14675 Gna14	guanine nucleotide binding protein, alpha 14
TC19000016	0.12169	-1.65014	RHEB_cKO down vs WT	-0.72259 -3σ	---	---	---	Gm10197
TC11000011	0.0252	-1.65315	RHEB_cKO down vs WT	-0.72521 -3σ	11 B5 11	216961	216961 Coro6	coronin 6
TC13000012	0.081033	-1.65374	RHEB_cKO down vs WT	-0.72573 -3σ	13 D2.1 13:	74559	74559 Elovl7	ELOVL family member 7, elongation of long chain fatty acids (yeast)
TC06000015	0.002179	-1.65377	RHEB_cKO down vs WT	-0.72576 -3σ	6 F3 6	408064	408064 BC064078	cDNA sequence BC064078
TC09000023	0.349165	-1.65417	RHEB_cKO down vs WT	-0.7261 -3σ	9 B 9 31.6	16949	16949 Loxl1	lysyl oxidase-like 1
TC02000015	0.005845	-1.65438	RHEB_cKO down vs WT	-0.72629 -3σ	2 F1 2 61.8	99138	99138 Stard7	START domain containing 7
TC19000013	0.009121	-1.65541	RHEB_cKO down vs WT	-0.72719 -3σ	19 C1 19	240614	240614 Ranbp6	RAN binding protein 6
TC19000012	0.008888	-1.65567	RHEB_cKO down vs WT	-0.72742 -3σ	19 B 19	1E+08	1E+08 Gm3775	predicted gene 3775
TC02000034	0.035602	-1.65585	RHEB_cKO down vs WT	-0.72757 -3σ	2 B 2	76899	76899 Golga1	golgi autoantigen, golgin subfamily a, 1
TC08000025	0.405637	-1.65664	RHEB_cKO down vs WT	-0.72826 -3σ	8 C2 8	13617	13617 Ednra	endothelin receptor type A
TC12000012	0.012413	-1.65677	RHEB_cKO down vs WT	-0.72837 -3σ	12 F1 12	104759	104759 Pld4	phospholipase D family, member 4
TC09000025	0.078253	-1.6572	RHEB_cKO down vs WT	-0.72875 -3σ	9 C 9	235442	235442 Rab8b	RAB8B, member RAS oncogene family
TC08000024	0.082465	-1.6573	RHEB_cKO down vs WT	-0.72884 -3σ	---	---	---	Gm11034
TC02000051	0.323349	-1.65841	RHEB_cKO down vs WT	-0.7298 -3σ	2 H3 2	209232	209232 Wfdc5	WAP four-disulfide core domain 5
TC14000001	0.02892	-1.65876	RHEB_cKO down vs WT	-0.7301 -3σ	---	---	---	Gm15935
TC03000002	0.027976	-1.65895	RHEB_cKO down vs WT	-0.73027 -3σ	3 A3 3	67576	67576 4930429B RIKEN cDNA 4930429B21 gene	
TCOX00000C	0.025669	-1.65971	RHEB_cKO down vs WT	-0.73093 -3σ	X A1.1 X 3	54636	54636 Wdr45	WD repeat domain 45
TC03000003	0.014902	-1.66047	RHEB_cKO down vs WT	-0.73136 -3σ	3 C 3	211666	211666 Mgst2	microsomal glutathione S-transferase 2
TC07000005	0.002005	-1.66272	RHEB_cKO down vs WT	-0.73354 -3σ	7 A3 7	51798	51798 Ech1	enoyl coenzyme A hydratase 1, peroxisomal
TC01000008	0.04647	-1.66322	RHEB_cKO down vs WT	-0.73398 -3σ	---	---	---	Gm15369
TC08000015	0.117521	-1.66389	RHEB_cKO down vs WT	-0.73456 -3σ	8 E2 8	69581	69581 Rhou	ras homolog family member U
TC10000005	0.00322	-1.66444	RHEB_cKO down vs WT	-0.73503 -3σ	10 C1 10 :	70615	70615 Ankrd24	ankyrin repeat domain 24
TC02000015	0.008899	-1.66459	RHEB_cKO down vs WT	-0.73516 -3σ	---	---	---	Gm14013
TC11000034	0.197345	-1.66519	RHEB_cKO down vs WT	-0.73569 -3σ	11 C 11	66569	66569 Gdpd1	glycerophosphodiester phosphodiesterase domain containing 1
TC01000003	0.080613	-1.66758	RHEB_cKO down vs WT	-0.73776 -3σ	1 C1.1 1	227102	227102 Ormdl1	ORM1-like 1 (S. cerevisiae)
TC19000015	0.354945	-1.66826	RHEB_cKO down vs WT	-0.73834 -3σ	19 C3 19	545291	545291 Hpse2	heparanase 2
TC03000004	0.10744	-1.66864	RHEB_cKO down vs WT	-0.73868 -3σ	3 D 3	229333	229333 C130079G RIKEN cDNA C130079G13 gene	
TC12000006	0.000137	-1.67021	RHEB_cKO down vs WT	-0.74003 -3σ	12 C3 12	210762	210762 Ppp1r36	protein phosphatase 1, regulatory subunit 36
TC1200001C	0.153298	-1.67056	RHEB_cKO down vs WT	-0.74033 -3σ	12 E 12	68149	68149 Otub2	OTU domain, ubiquitin aldehyde binding 2
TC04000032	0.127185	-1.67061	RHEB_cKO down vs WT	-0.74037 -3σ	4 C7 4	29864	29864 Rnf11	ring finger protein 11
TC02000023	0.169985	-1.6712	RHEB_cKO down vs WT	-0.74088 -3σ	2 H1 2	98932	98932 Myl9	myosin, light polypeptide 9, regulatory
TC12000008	0.306501	-1.67165	RHEB_cKO down vs WT	-0.74128 -3σ	12 D2 12	217721	217721 Mfsd7c	major facilitator superfamily domain containing 7C
TC19000014	0.178186	-1.67337	RHEB_cKO down vs WT	-0.74276 -3σ	19 C2 19 :	15925	15925 Ide	insulin degrading enzyme
TC0900002C	0.331172	-1.67482	RHEB_cKO down vs WT	-0.74401 -3σ	9 A5.1 9	244810	244810 AW551984	expressed sequence AW551984
TC09000011	0.032674	-1.67571	RHEB_cKO down vs WT	-0.74477 -3σ	9 E3.3 9	22038	22038 Plscr1	phospholipid scramblase 1
TC14000021	0.500465	-1.67652	RHEB_cKO down vs WT	-0.74547 -3σ	14 C3 14 :	17228	17228 Cma1	chymase 1, mast cell
TC01000014	0.37071	-1.67746	RHEB_cKO down vs WT	-0.74628 -3σ	1 H2.1 1	474332	474332 Dnm3os	dynamin 3, opposite strand
TC0400004C	0.010476	-1.67868	RHEB_cKO down vs WT	-0.74733 -3σ	4 E2 4 80.1	100198	100198 H6pd	hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)
TC1500000C	0.104153	-1.67869	RHEB_cKO down vs WT	-0.74734 -3σ</				

TC1000000E	0.00135	-1.6975 RHEB_cKO down vs WT	-0.76341 -3σ	10 C1 10 E	18483	18483 Palm	paralemmin
TC07000005	0.037386	-1.69892 RHEB_cKO down vs WT	-0.76462 -3σ	7 A3 7	60594	60594 Capn12	calpain 12
TC11000027	0.087079	-1.70088 RHEB_cKO down vs WT	-0.76628 -3σ	11 B1.3 11	52570	52570 Ccdc69	coiled-coil domain containing 69
TC0900000E	0.027026	-1.70096 RHEB_cKO down vs WT	-0.76635 -3σ	9 A5.3 9	58233	58233 Dnaja4	Dnaj heat shock protein family (Hsp40) member A4
TC15000019	0.115068	-1.70188 RHEB_cKO down vs WT	-0.76713 -3σ	15 E1 15	319953	319953 Ttl1	tubulin tyrosine ligase-like 1
TC02000024	0.130357	-1.70253 RHEB_cKO down vs WT	-0.76768 -3σ	2 H3 2	76080	76080 Ttpal	tocopherol (alpha) transfer protein-like
TC08000029	0.005892	-1.7041 RHEB_cKO down vs WT	-0.76901 -3σ	8 E1 8	76527	76527 Il34	interleukin 34
TC08000001	0.149244	-1.70505 RHEB_cKO down vs WT	-0.76982 -3σ	8 A1.1 8 7	26889	26889 Cln8	ceroid-lipofuscinosis, neuronal 8
TC04000032	2.43E-05	-1.7052 RHEB_cKO down vs WT	-0.76994 -3σ	4 C7 4 51.	12580	12580 Cdkn2c	cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
TC06000012	0.024207	-1.70592 RHEB_cKO down vs WT	-0.77055 -3σ	6 F1 6 53.	28006	28006 Fam21	family with sequence similarity 21
TC06000019	0.053794	-1.7063 RHEB_cKO down vs WT	-0.77087 -3σ	6 A3.1 6	319832	319832 Tmem229	transmembrane protein 229A
TC0500000E	0.205716	-1.70834 RHEB_cKO down vs WT	-0.77259 -3σ	5 C3.2 5	70701	70701 Nipal1	NIPA-like domain containing 1
TC1200000C	0.340038	-1.70881 RHEB_cKO down vs WT	-0.77299 -3σ	12 A1.1 12	23967	23967 Osr1	odd-skipped related 1 (Drosophila)
TC02000015	0.206029	-1.71225 RHEB_cKO down vs WT	-0.7759 -3σ	2 2 E3	13711	13711 Elf5	E74-like factor 5
TC04000039	0.009824	-1.71233 RHEB_cKO down vs WT	-0.77596 -3σ	---	---	Gm13080	predicted gene 13080
TC09000017	0.392497	-1.71476 RHEB_cKO down vs WT	-0.77801 -3σ	9 A2 9	244698	244698 Hephl1	hephaestin-like 1
TC09000014	0.031488	-1.715 RHEB_cKO down vs WT	-0.77821 -3σ	9 F2 9	16578	16578 Kif9	kinesin family member 9
TC01000017	0.071607	-1.71522 RHEB_cKO down vs WT	-0.7784 -3σ	1 H5 1 84.	320404	320404 Itpkb	inositol 1,4,5-trisphosphate 3-kinase B
TC13000022	0.002468	-1.71698 RHEB_cKO down vs WT	-0.77987 -3σ	13 B3 13	66129	66129 Aaed1	AhpC/TSA antioxidant enzyme domain containing 1
TC08000024	0.011971	-1.71781 RHEB_cKO down vs WT	-0.78057 -3σ	8 8 C1	70807	70807 Arrdc2	arrestin domain containing 2
TC08000024	0.007066	-1.7194 RHEB_cKO down vs WT	-0.7819 -3σ	8 B3.3 8	546071	546071 Mast3	microtubule associated serine/threonine kinase 3
TC14000003	0.371977	-1.71998 RHEB_cKO down vs WT	-0.78239 -3σ	14 B 14 20	14560	14560 Gdf10	growth differentiation factor 10
TC0100003C	0.043818	-1.72056 RHEB_cKO down vs WT	-0.78288 -3σ	1 E4 1 56.	54354	54354 Rassf5	Ras association (RalGDS/AF-6) domain family member 5
TC05000011	0.005811	-1.72127 RHEB_cKO down vs WT	-0.78347 -3σ	5 F 5	72392	72392 Tmem175	transmembrane protein 175
TC07000015	0.021792	-1.72365 RHEB_cKO down vs WT	-0.78547 -3σ	7 7 F2	19024	19024 Ppfibp2	PTPRF interacting protein, binding protein 2 (liprin beta 2)
TC07000013	0.014174	-1.72392 RHEB_cKO down vs WT	-0.78569 -3σ	7 7 E2	72461	72461 Prcp	prolylcarboxypeptidase (angiotensinase C)
TC08000017	0.001452	-1.72504 RHEB_cKO down vs WT	-0.78663 -3σ	8 A1.3 8 1	11601	11601 Angpt2	angiopoietin 2
TC11000018	0.001174	-1.72505 RHEB_cKO down vs WT	-0.78664 -3σ	11 11 E1	26399	26399 Map2k6	mitogen-activated protein kinase kinase 6
TC1000002C	0.033698	-1.7254 RHEB_cKO down vs WT	-0.78693 -3σ	---	---	Gm15199	predicted gene 15199
TC1900000E	0.032729	-1.72728 RHEB_cKO down vs WT	-0.7885 -3σ	19 C3 19 E	20250	20250 Scd2	stearoyl-Coenzyme A desaturase 2
TC1900000E	0.058753	-1.72768 RHEB_cKO down vs WT	-0.78884 -3σ	19 C3 19	226122	226122 Ubtd1	ubiquitin domain containing 1
TC03000014	0.039617	-1.72863 RHEB_cKO down vs WT	-0.78963 -3σ	3 G3 3	69117	69117 Adh6a	alcohol dehydrogenase 6A (class V)
TC04000041	0.179753	-1.72867 RHEB_cKO down vs WT	-0.78967 -3σ	4 E2 4 87.	79554	79554 Cptp	ceramide-1-phosphate transfer protein
TC07000012	0.003096	-1.73101 RHEB_cKO down vs WT	-0.79162 -3σ	7 E1 7 51.	23859	23859 Dlg2	discs, large homolog 2 (Drosophila)
TC05000029	0.011846	-1.73128 RHEB_cKO down vs WT	-0.79184 -3σ	5 F 5 52.2	14020	14020 Evi5	ecotropic viral integration site 5
TC08000024	0.016142	-1.73509 RHEB_cKO down vs WT	-0.79501 -3σ	8 8 C2	78514	78514 Arhgap10	Rho GTPase activating protein 10
TC1700000E	0.02478	-1.73557 RHEB_cKO down vs WT	-0.79541 -3σ	17 B2 17	70274	70274 Ly6g6e	lymphocyte antigen 6 complex, locus G6E
TC09000004	0.187011	-1.73599 RHEB_cKO down vs WT	-0.79576 -3σ	9 9 B	53376	53376 Usp2	ubiquitin specific peptidase 2
TC09000011	0.002808	-1.73618 RHEB_cKO down vs WT	-0.79592 -3σ	9 E2 9	12040	12040 Bckdhb	branched chain ketoacid dehydrogenase E1, beta polypeptide
TC18000014	0.120752	-1.737 RHEB_cKO down vs WT	-0.7966 -3σ	18 E1 18	328967	328967 Arhgef37	Rho guanine nucleotide exchange factor (GEF) 37
TC02000005	0.059278	-1.73855 RHEB_cKO down vs WT	-0.79788 -3σ	---	---	Gm13608	predicted gene 13608
TC17000016	0.011704	-1.74061 RHEB_cKO down vs WT	-0.7996 -3σ	17 A3.3 17	106581	106581 Fam234a	family with sequence similarity 234, member A
TC05000027	0.031106	-1.74178 RHEB_cKO down vs WT	-0.80056 -3σ	5 E3 5	231474	231474 Paqr3	progesterin and adipoQ receptor family member III
TC11000003	0.005499	-1.74385 RHEB_cKO down vs WT	-0.80228 -3σ	11 A4 11	78372	78372 Snrnp25	small nuclear ribonucleoprotein 25 (U11/U12)
TC03000007	0.011693	-1.74415 RHEB_cKO down vs WT	-0.80253 -3σ	3 E3-F1 3	21827	21827 Thbs3	thrombospondin 3
TC05000025	0.0254	-1.74468 RHEB_cKO down vs WT	-0.80296 -3σ	5 C3.2 5 3	21682	21682 Tec	tec protein tyrosine kinase
TC11000032	0.022524	-1.74635 RHEB_cKO down vs WT	-0.80434 -3σ	11 B5 11	216965	216965 Taok1	TAO kinase 1
TC11000008	0.132777	-1.74711 RHEB_cKO down vs WT	-0.80497 -3σ	11 B3 11	14457	14457 Gas7	growth arrest specific 7
TC07000001	0.226603	-1.74794 RHEB_cKO down vs WT	-0.80566 -3σ	7 A1 7	381845	381845 Rnf225	ring finger protein 225
TC04000015	0.01259	-1.74844 RHEB_cKO down vs WT	-0.80607 -3σ	4 E2 4	269604	269604 Gpr157	G protein-coupled receptor 157
TC10000015	0.188829	-1.74875 RHEB_cKO down vs WT	-0.80632 -3σ	10 D3 10	70061	70061 Sdr9c7	4short chain dehydrogenase/reductase family 9C, member 7
TC02000038	0.094536	-1.74885 RHEB_cKO down vs WT	-0.8064 -3σ	2 C3 2 45.	14231	14231 Fkbp7	FK506 binding protein 7
TC1200001C	0.033478	-1.75092 RHEB_cKO down vs WT	-0.80811 -3σ	12 12 F1	74521	74521 Ppp4r4	protein phosphatase 4, regulatory subunit 4
TC07000022	0.100258	-1.75125 RHEB_cKO down vs WT	-0.80839 -3σ	7 A1 7 3.8	22776	22776 Zim1	zinc finger, imprinted 1
TC10000001	0.258562	-1.75235 RHEB_cKO down vs WT	-0.80929 -3σ	10 A2 10	17684	17684 Cited2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal dom:
TC07000026	0.058222	-1.75279 RHEB_cKO down vs WT	-0.80966 -3σ	7 A3 7	243881	243881 Cyp2b23	cytochrome P450, family 2, subfamily b, polypeptide 23
TC14000001	0.008295	-1.75358 RHEB_cKO down vs WT	-0.81031 -3σ	14 14 A3	21834	21834 Thrb	thyroid hormone receptor beta
TC17000016	0.030134	-1.75368 RHEB_cKO down vs WT	-0.81038 -3σ	17 17 A3	50817	50817 Capn15	calpain 15
TC06000015	0.083777	-1.75428 RHEB_cKO down vs WT	-0.81088 -3σ	8 C1 8	21968	21968 Tom1	target of myb1 trafficking protein
TC04000015	0.126627	-1.75441 RHEB_cKO down vs WT	-0.81098 -3σ	4 D2.2 4	66260	66260 Tmem54	transmembrane protein 54
TC11000006	0.080404	-1.75521 RHEB_cKO down vs WT	-0.81164 -3σ	---	---	Gm12226	predicted pseudogene 12226
TC12000016	0.037037	-1.75563 RHEB_cKO down vs WT	-0.81199 -3σ	12 B1 12 1	11861	11861 Arl4a	ADP-ribosylation factor-like 4A
TC03000019	0.017246	-1.75718 RHEB_cKO down vs WT	-0.81327 -3σ	3 3 C	70804	70804 Pgmc2	progesterone receptor membrane component 2
TC18000002	0.035053	-1.75727 RHEB_cKO down vs WT	-0.81334 -3σ	18 A2 18	68591	68591 Mocos	molybdenum cofactor sulfurase
TC11000018	0.040876	-1.7586 RHEB_cKO down vs WT	-0.81443 -3σ	11 E2 11	26		

TC11000011	0.011208	-1.79003 RHEB_cKO down vs WT	-0.83999 -3σ	11 B5 11	68385	68385 Tlcld1	TLC domain containing 1
TC07000044	0.094629	-1.79144 RHEB_cKO down vs WT	-0.84112 -3σ	7 7 F4	55987	55987 Cpxm2	carboxypeptidase X 2 (M14 family)
TC16000021	0.051976	-1.79405 RHEB_cKO down vs WT	-0.84322 -3σ	16 C3.3 16	16155	16155 Il10rb	interleukin 10 receptor, beta
TC0X000005	0.265509	-1.79584 RHEB_cKO down vs WT	-0.84466 -3σ	X C3 X 42.	11835	11835 Ar	androgen receptor
TC08000005	0.002425	-1.79826 RHEB_cKO down vs WT	-0.8466 -3σ	8 C3 8 41.	102093	102093 Phkb	phosphorylase kinase beta
TC12000002	0.082889	-1.79881 RHEB_cKO down vs WT	-0.84705 -3σ	12 B-C1 1:	22160	22160 Twist1	twist basic helix-loop-helix transcription factor 1
TC11000007	0.28535	-1.80157 RHEB_cKO down vs WT	-0.84926 -3σ	11 B2 11 :	76293	76293 Mfap4	microfibrillar-associated protein 4
TC19000006	4.26E-05	-1.80185 RHEB_cKO down vs WT	-0.84948 -3σ	19 C3 19	26456	26456 Sema4g	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and
TC07000024	0.013902	-1.80336 RHEB_cKO down vs WT	-0.85069 -3σ	7 A3 7 9.9	11812	11812 Apoc1	apolipoprotein C-I
TC0100000C	0.003295	-1.80414 RHEB_cKO down vs WT	-0.85132 -3σ	1 A1 1	319263	319263 Pcmtd1	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1
TC03000005	0.054714	-1.80635 RHEB_cKO down vs WT	-0.85308 -3σ	3 E1 3 29.!	17380	17380 Mme	membrane metallo endopeptidase
TC03000027	0.000984	-1.80681 RHEB_cKO down vs WT	-0.85345 -3σ	3 F2.3 3	329735	329735 4933431E2	RIKEN cDNA 4933431E20 gene
TC05000018	0.011118	-1.80882 RHEB_cKO down vs WT	-0.85505 -3σ	---	---	Gm6054	predicted gene 6054
TC08000024	0.078425	-1.80922 RHEB_cKO down vs WT	-0.85537 -3σ	8 B3.3 8	65972	65972 Ifi30	interferon gamma inducible protein 30
TC02000025	0.084758	-1.80966 RHEB_cKO down vs WT	-0.85572 -3σ	2 H3 2 85.	19025	19025 Ctsa	cathepsin A
TC02000028	0.00056	-1.81048 RHEB_cKO down vs WT	-0.85637 -3σ	2 H4 2	245867	245867 Pcmtd2	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 2
TC10000018	0.120935	-1.81137 RHEB_cKO down vs WT	-0.85708 -3σ	10 A4 10	11846	11846 Arg1	arginase, liver
TC09000029	0.004798	-1.81264 RHEB_cKO down vs WT	-0.8581 -3σ	9 E3.3 9	213208	213208 Il20rb	interleukin 20 receptor beta
TC12000009	0.02492	-1.81415 RHEB_cKO down vs WT	-0.8593 -3σ	12 D3 12	71349	71349 5430427M	RIKEN cDNA 5430427M07 gene
TC14000017	0.075585	-1.81473 RHEB_cKO down vs WT	-0.85976 -3σ	14 B 14	432839	432839 Gprin2	G protein regulated inducer of neurite outgrowth 2
TC01000025	0.033823	-1.81679 RHEB_cKO down vs WT	-0.86139 -3σ	1 C3 1	381269	381269 Mreg	melanoregulin
TC12000003	0.012815	-1.81758 RHEB_cKO down vs WT	-0.86202 -3σ	12 A3 12	217463	217463 Snx13	sorting nexin 13
TC12000003	0.0044683	-1.81772 RHEB_cKO down vs WT	-0.86213 -3σ	12 B1 12 1	238130	238130 Dock4	dedicator of cytokinesis 4
TC15000017	0.001497	-1.81893 RHEB_cKO down vs WT	-0.86309 -3σ	15 D3 15	78725	78725 D730001G	RIKEN cDNA D730001G18 gene
TC1900001C	0.00803	-1.81926 RHEB_cKO down vs WT	-0.86335 -3σ	19 A 19	56072	56072 Lgals12	lectin, galactose binding, soluble 12
TC14000017	0.03209	-1.82108 RHEB_cKO down vs WT	-0.86479 -3σ	14 B 14	26419	26419 Mapk8	mitogen-activated protein kinase 8
TC01000001	0.125533	-1.82364 RHEB_cKO down vs WT	-0.86682 -3σ	1 1 A5	74229	74229 Paqr8	progestin and adipoQ receptor family member VIII
TC02000016	0.050212	-1.82407 RHEB_cKO down vs WT	-0.86717 -3σ	---	---	Gm13929	predicted gene 13929
TC08000011	0.0664	-1.82655 RHEB_cKO down vs WT	-0.86912 -3σ	8 D3 8	72361	72361 Ces2g	carboxylesterase 2G
TC06000015	0.024528	-1.82718 RHEB_cKO down vs WT	-0.86962 -3σ	6 A3.3 6 1	22214	22214 Ube2h	ubiquitin-conjugating enzyme E2H
TC10000005	0.001011	-1.82789 RHEB_cKO down vs WT	-0.87018 -3σ	10 B4 10	216001	216001 Micu1	mitochondrial calcium uptake 1
TC18000013	0.155183	-1.82978 RHEB_cKO down vs WT	-0.87167 -3σ	18 D2 18	320253	320253 March3	membrane-associated ring finger (C3HC4) 3
TC14000019	0.125357	-1.83018 RHEB_cKO down vs WT	-0.87199 -3σ	14 C1 14	114874	114874 Ddhd1	DDHD domain containing 1
TC0900002E	0.00414	-1.83087 RHEB_cKO down vs WT	-0.87253 -3σ	9 D 9	546143	546143 Ccpg1os	cell cycle progression 1, opposite strand
TC0700001E	0.180234	-1.83134 RHEB_cKO down vs WT	-0.8729 -3σ	7 F1 7 57.	11535	11535 Adm	adrenomedullin
TC0300002E	0.001522	-1.83169 RHEB_cKO down vs WT	-0.87317 -3σ	3 F2.2 3	242125	242125 Mab21l3	mab-21-like 3 (C. elegans)
TC04000011	0.006167	-1.83276 RHEB_cKO down vs WT	-0.87402 -3σ	---	---	Gm12727	predicted gene 12727
TC18000001	0.04451	-1.83286 RHEB_cKO down vs WT	-0.8741 -3σ	18 A2 18	67664	67664 Rnf125	ring finger protein 125
TC0X00001E	0.007521	-1.83553 RHEB_cKO down vs WT	-0.8762 -3σ	X F3 X	54609	54609 Ubqln2	ubiquilin 2
TC01000008	0.004679	-1.83653 RHEB_cKO down vs WT	-0.87698 -3σ	1 D 1	22236	22236 Ugt1a2	UDP glucuronosyltransferase 1 family, polypeptide A2
TC09000012	0.0202	-1.8374 RHEB_cKO down vs WT	-0.87766 -3σ	9 9	319707	319707 C430002N	RIKEN cDNA C430002N11 gene
TC02000017	0.013852	-1.83842 RHEB_cKO down vs WT	-0.87846 -3σ	2 E4-E5 2	56357	56357 Ivd	isovaleryl coenzyme A dehydrogenase
TC0X000025	0.048956	-1.83906 RHEB_cKO down vs WT	-0.87897 -3σ	---	---	Gm8876	predicted gene 8876
TC01000033	0.028419	-1.83977 RHEB_cKO down vs WT	-0.87953 -3σ	1 G3 1 67.	20652	20652 Soat1	sterol O-acyltransferase 1
TC13000022	0.058674	-1.84013 RHEB_cKO down vs WT	-0.87981 -3σ	13 B3 13	66631	66631 Mfsd14b	major facilitator superfamily domain containing 14B
TC0400003E	0.081645	-1.84055 RHEB_cKO down vs WT	-0.88014 -3σ	4 D3 4	26971	26971 Pla2g2f	phospholipase A2, group IIF
TC11000037	0.032317	-1.84119 RHEB_cKO down vs WT	-0.88064 -3σ	---	---	Gm14180	predicted gene 14180
TC13000006	0.014701	-1.84121 RHEB_cKO down vs WT	-0.88065 -3σ	---	1E+08	1E+08 Gm10782	predicted gene 10782
TC10000017	0.00299	-1.84193 RHEB_cKO down vs WT	-0.88122 -3σ	10 10 A	56535	56535 Pex3	peroxisomal biogenesis factor 3
TC18000011	0.049579	-1.84216 RHEB_cKO down vs WT	-0.8814 -3σ	18 B1 18 1	170459	170459 Stard4	STAR-related lipid transfer (START) domain containing 4
TC04000033	0.01986	-1.84221 RHEB_cKO down vs WT	-0.88143 -3σ	4 D2.1 4	68625	68625 Cfap57	cilia and flagella associated protein 57
TC07000042	0.045822	-1.8426 RHEB_cKO down vs WT	-0.88174 -3σ	7 F2 7 65.	12585	12585 Cdr2	cerebellar degeneration-related 2
TC15000017	0.049797	-1.84478 RHEB_cKO down vs WT	-0.88345 -3σ	15 D3 15	223645	223645 Mroh6	maestro heat-like repeat family member 6
TC02000017	0.046522	-1.84489 RHEB_cKO down vs WT	-0.88354 -3σ	2 E5 2	69065	69065 Chac1	Chac, cation transport regulator 1
TC12000007	0.003375	-1.84514 RHEB_cKO down vs WT	-0.88373 -3σ	12 D1 12 :	26897	26897 Acot1	acyl-CoA thioesterase 1
TC03000024	0.129188	-1.84627 RHEB_cKO down vs WT	-0.88462 -3σ	3 F1 3	631101	631101 Lce1k	late cornified envelope 1K
TC01000003	0.381647	-1.84677 RHEB_cKO down vs WT	-0.885 -3σ	1 C1.1 1 2	12825	12825 Col3a1	collagen, type III, alpha 1
TC15000015	0.003338	-1.84936 RHEB_cKO down vs WT	-0.88703 -3σ	15 E2 15	223739	223739 5031439G	RIKEN cDNA 5031439G07 gene
TC12000015	0.042773	-1.85135 RHEB_cKO down vs WT	-0.88858 -3σ	12 C3 12	81535	81535 Sgpp1	sphingosine-1-phosphate phosphatase 1
TC05000005	0.112635	-1.85153 RHEB_cKO down vs WT	-0.88872 -3σ	5 C1 5 27.	20657	20657 Sod3	superoxide dismutase 3, extracellular
TC08000013	0.04642	-1.85252 RHEB_cKO down vs WT	-0.88949 -3σ	8 E1 8	93739	93739 Gabarapl2	gamma-aminobutyric acid (GABA) A receptor-associated protein-like 2
TC03000005	0.006614	-1.85252 RHEB_cKO down vs WT	-0.88949 -3σ	3 F2.1 3	213121	213121 Ankrd35	ankyrin repeat domain 35
TSUnmappe	0.013063	-1.85311 RHEB_cKO down vs WT	-0.88995 -3σ	5 G2 5 76.	11423	11423 Ache	acetylcholinesterase
TC03000024	0.191658	-1.85436 RHEB_cKO down vs WT	-0.89092 -3σ	3 F1 3	67828	67828 Lce1f	late cornified envelope 1F
TC0X000028	0.250034	-1.85598 RHEB_cKO down vs WT	-0.89218 -3σ	X X A2-A			

TC140000005	0.002216	-1.88363	RHEB_cKO down vs WT	-0.91352 -3σ	14 D2 14	105653	105653	Phyhip	phytanoyl-CoA hydroxylase interacting protein
TC14000015	0.077797	-1.88434	RHEB_cKO down vs WT	-0.91406 -3σ	14 A3 14	78787	78787	Usp54	ubiquitin specific peptidase 54
TC03000022	0.046811	-1.88445	RHEB_cKO down vs WT	-0.91415 -3σ	3 E3 3	24088	24088	Tlr2	toll-like receptor 2
TC05000015	0.068192	-1.88701	RHEB_cKO down vs WT	-0.9161 -3σ	5 G2 5 75.	15507	15507	Hspb1	heat shock protein 1
TC09000001	0.018986	-1.88715	RHEB_cKO down vs WT	-0.91621 -3σ	9 9 A3	69137	69137	Vstm5	V-set and transmembrane domain containing 5
TC07000016	0.077815	-1.88756	RHEB_cKO down vs WT	-0.91652 -3σ	7 E2-E3 7	11717	11717	Ampd3	adenosine monophosphate deaminase 3
TC19000007	0.000381	-1.88787	RHEB_cKO down vs WT	-0.91676 -3σ	19 D2 19	27360	27360	Add3	adducin 3 (gamma)
TC18000004	0.003685	-1.88976	RHEB_cKO down vs WT	-0.9182 -3σ	18 B3 18	269016	269016	Sh3rf2	SH3 domain containing ring finger 2
TC11000011	0.025197	-1.89409	RHEB_cKO down vs WT	-0.92151 -3σ	11 B5 11	11676	11676	Aldoc	aldolase C, fructose-bisphosphate
TC07000043	0.226137	-1.89556	RHEB_cKO down vs WT	-0.92262 -3σ	7 F3 7 69.	76560	76560	Prss8	protease, serine 8 (prostasin)
TC11000031	0.038917	-1.89572	RHEB_cKO down vs WT	-0.92275 -3σ	11 B4 11	83429	83429	Ctns	cystinosis, nephropathic
TC04000037	0.036173	-1.89806	RHEB_cKO down vs WT	-0.92453 -3σ	4 D3 4 69.	12260	12260	C1qb	complement component 1, q subcomponent, beta polypeptide
TC17000028	0.003578	-1.89909	RHEB_cKO down vs WT	-0.92531 -3σ	17 B1 17	15039	15039	H2-T22	histocompatibility 2, T region locus 22
TC16000011	0.058934	-1.90059	RHEB_cKO down vs WT	-0.92645 -3σ	16 A1 16	239691	239691	AU021092	expressed sequence AU021092
TC03000021	0.092271	-1.90093	RHEB_cKO down vs WT	-0.92671 -3σ	---	---	---	Gm20689	predicted gene 20689
TC10000022	0.005395	-1.9034	RHEB_cKO down vs WT	-0.92858 -3σ	10 B4 10	237360	237360	Adams14	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin
TC04000010	0.030741	-1.90423	RHEB_cKO down vs WT	-0.92921 -3σ	4 C6 4 45.	26563	26563	Ror1	receptor tyrosine kinase-like orphan receptor 1
TC0X000016	0.061967	-1.90442	RHEB_cKO down vs WT	-0.92935 -3σ	X F5 X 76.	70008	70008	Ace2	angiotensin I converting enzyme (peptidyl-dipeptidase A) 2
TC03000011	0.018725	-1.90485	RHEB_cKO down vs WT	-0.92967 -3σ	3 F3 3	20661	20661	Sort1	sortilin 1
TC1900000C	0.111528	-1.90669	RHEB_cKO down vs WT	-0.93107 -3σ	19 A 19	73458	73458	Aldh3b3	aldehyde dehydrogenase 3 family, member B3
TC1200002C	0.004464	-1.90704	RHEB_cKO down vs WT	-0.93134 -3σ	12 D1 12	104776	104776	Aldh6a1	aldehyde dehydrogenase family 6, subfamily A1
TC1900000E	0.036429	-1.9072	RHEB_cKO down vs WT	-0.93146 -3σ	19 C3 19	20249	20249	Scd1	stearoyl-Coenzyme A desaturase 1
TC13000001	0.109686	-1.90984	RHEB_cKO down vs WT	-0.93345 -3σ	---	---	---	Tcrg-C3	T cell receptor gamma, constant 3
TC03000023	0.000532	-1.91063	RHEB_cKO down vs WT	-0.93405 -3σ	3 F1 3	20615	20615	Snapin	SNAP-associated protein
TC11000037	0.34516	-1.91338	RHEB_cKO down vs WT	-0.93612 -3σ	11 D 11	107656	107656	Krt9	keratin 9
TC03000022	0.108717	-1.91339	RHEB_cKO down vs WT	-0.93652 -3σ	3 F1 3	229474	229474	Fhdc1	FH2 domain containing 1
TC04000035	0.010925	-1.91583	RHEB_cKO down vs WT	-0.93797 -3σ	4 D2.2 4	76850	76850	Ago4	argonaute RISC catalytic subunit 4
TC16000003	0.094261	-1.91657	RHEB_cKO down vs WT	-0.93853 -3σ	16 B1 16	71338	71338	Tprg	transformation related protein 63 regulated
TC07000015	0.156152	-1.91674	RHEB_cKO down vs WT	-0.93865 -3σ	7 E3 7 55.	20597	20597	Smpd1	sphingomyelin phosphodiesterase 1, acid lysosomal
TC16000021	0.079922	-1.91683	RHEB_cKO down vs WT	-0.93872 -3σ	16 A1 16	58239	58239	Dexi	dexamethasone-induced transcript
TC01000022	0.047599	-1.91691	RHEB_cKO down vs WT	-0.93878 -3σ	1 B 1	1E+08	1E+08	Gm16894	predicted gene, 16894
TC03000002	0.255087	-1.91949	RHEB_cKO down vs WT	-0.94073 -3σ	3 B 3	329628	329628	Fat4	FAT atypical cadherin 4
TC14000005	0.009349	-1.92018	RHEB_cKO down vs WT	-0.94124 -3σ	14 14 C3	20680	20680	Sox7	SRY (sex determining region Y)-box 7
TC04000038	0.010976	-1.92263	RHEB_cKO down vs WT	-0.94308 -3σ	4 D3 4 70.	18784	18784	Pla2g5	phospholipase A2, group V
TC15000011	0.01957	-1.9235	RHEB_cKO down vs WT	-0.94373 -3σ	15 A2 15	20512	20512	Slc1a3	solute carrier family 1 (glial high affinity glutamate transporter), member 3
TC04000021	0.002642	-1.92533	RHEB_cKO down vs WT	-0.9451 -3σ	4 A1 4 2.3	18619	18619	Penk	preproenkephalin
TC1900000C	0.242554	-1.92838	RHEB_cKO down vs WT	-0.94739 -3σ	19 A 19	70445	70445	Cd248	CD248 antigen, endosialin
TC09000027	0.057963	-1.92908	RHEB_cKO down vs WT	-0.94791 -3σ	9 E3.1 9 4	17436	17436	Me1	malic enzyme 1, NADP(+)-dependent, cytosolic
TC05000020	0.159663	-1.93075	RHEB_cKO down vs WT	-0.94916 -3σ	5 A3 5 11.	213948	213948	Atg9b	autophagy related 9B
TC11000016	0.065157	-1.93129	RHEB_cKO down vs WT	-0.94957 -3σ	11 D 11 6	14459	14459	Gast	gastrin
TC11000011	0.044913	-1.93204	RHEB_cKO down vs WT	-0.95013 -3σ	11 B5 11	52466	52466	Slc46a1	solute carrier family 46, member 1
TC17000016	0.009608	-1.93271	RHEB_cKO down vs WT	-0.95063 -3σ	17 B1 17	26378	26378	Decr2	2-4-dienoyl-Coenzyme A reductase 2, peroxisomal
TC04000015	0.124284	-1.93324	RHEB_cKO down vs WT	-0.95102 -3σ	---	---	---	Gm12968	predicted gene 12968
TC07000035	0.003023	-1.93362	RHEB_cKO down vs WT	-0.9513 -3σ	7 D3 7	16790	16790	Anpep	alanyl (membrane) aminopeptidase
TC02000003	0.044125	-1.93461	RHEB_cKO down vs WT	-0.95205 -3σ	2 A3 2 16.	215274	215274	Ilf1f10	interleukin 1 family, member 10
TC17000017	0.081796	-1.93536	RHEB_cKO down vs WT	-0.9526 -3σ	17 A3.3 17	20815	20815	Srkp1	serine/arginine-rich protein specific kinase 1
TC18000013	0.368043	-1.93696	RHEB_cKO down vs WT	-0.95379 -3σ	18 D1 18	16948	16948	Lox	lysyl oxidase
TC01000012	0.208739	-1.93969	RHEB_cKO down vs WT	-0.95583 -3σ	1 E4 1	71884	71884	Chit1	chitinase 1 (chitotriosidase)
TC09000024	0.040241	-1.93996	RHEB_cKO down vs WT	-0.95603 -3σ	9 9 C	74090	74090	Paqr5	progesterin and adipoQ receptor family member V
TC01000005	0.116856	-1.94424	RHEB_cKO down vs WT	-0.9592 -3σ	1 C3 1 33.	17756	17756	Map2	microtubule-associated protein 2
TC09000023	0.031197	-1.94496	RHEB_cKO down vs WT	-0.95974 -3σ	9 B 9	244895	244895	Peak1	pseudopodium-enriched atypical kinase 1
TC08000011	0.017444	-1.94622	RHEB_cKO down vs WT	-0.96067 -3σ	8 D1 8	244608	244608	Ccdc113	coiled-coil domain containing 113
TC01000023	0.070676	-1.94704	RHEB_cKO down vs WT	-0.96128 -3σ	1 C1.1 1 2	17912	17912	Myo1b	myosin IB
TC16000013	0.133393	-1.94828	RHEB_cKO down vs WT	-0.9622 -3σ	16 B1 16	239759	239759	Liph	lipase, member H
TC09000011	0.0354	-1.94929	RHEB_cKO down vs WT	-0.96295 -3σ	---	---	---	Gm11114	predicted gene 11114
TC15000015	0.388398	-1.95058	RHEB_cKO down vs WT	-0.96339 -3σ	15 15 D2	18606	18606	Enpp2	ectonucleotide pyrophosphatase/phosphodiesterase 2
TC10000026	0.173615	-1.95256	RHEB_cKO down vs WT	-0.96537 -3σ	10 C1 10	270757	270757	Bpifc	BPI fold containing family C
TC03000004	0.008842	-1.95362	RHEB_cKO down vs WT	-0.96615 -3σ	3 D 3	676914	676914	Gm9696	arylacetamide deacetylase-like 2 pseudogene
TC16000007	0.015546	-1.95839	RHEB_cKO down vs WT	-0.96967 -3σ	16 C1.1 16	320712	320712	Abi3bp	ABI gene family, member 3 (NESH) binding protein
TC03000019	0.062599	-1.95875	RHEB_cKO down vs WT	-0.96993 -3σ	3 C 3 26.6	26422	26422	Nbe	

TC02000003	0.164754	-1.99934 RHEB_cKO down vs WT	-0.99952 -3σ	2 A3 2 16.	54450	54450 II1f5	interleukin 1 family, member 5 (delta)
TC13000003	0.027977	-2.00352 RHEB_cKO down vs WT	-1.00254 -3σ	13 A3.3 13	20706	20706 Serpinb9b	serine (or cysteine) peptidase inhibitor, clade B, member 9b
TC12000021	0.000848	-2.00369 RHEB_cKO down vs WT	-1.00266 -3σ	12 12 F1	24000	24000 Ptpn21	protein tyrosine phosphatase, non-receptor type 21
TC06000004	0.01843	-2.0068 RHEB_cKO down vs WT	-1.0049 -3σ	6 B2.1 6	54324	54324 Arhgef5	Rho guanine nucleotide exchange factor (GEF) 5
TC02000043	0.010018	-2.00693 RHEB_cKO down vs WT	-1.00499 -3σ	2 E5 2 59.	19419	19419 Rasgrp1	RAS guanyl releasing protein 1
TC07000038	0.00906	-2.01047 RHEB_cKO down vs WT	-1.00753 -3σ	7 F1 7	50877	50877 Neu3	neuraminidase 3
TC08000005	0.00479	-2.01568 RHEB_cKO down vs WT	-1.01127 -3σ	8 8 B2	14081	14081 Acsl1	acyl-CoA synthetase long-chain family member 1
TC05000036	0.004421	-2.01782 RHEB_cKO down vs WT	-1.0128 -3σ	5 G3 5	71706	71706 Slc46a3	solute carrier family 46, member 3
TC01000009	0.01915	-2.02008 RHEB_cKO down vs WT	-1.01441 -3σ	1 D 1	208777	208777 Sned1	sushi, nidogen and EGF-like domains 1
TC07000017	0.009609	-2.02097 RHEB_cKO down vs WT	-1.01505 -3σ	7 F3 7	30949	30949 Lcmt1	leucine carboxyl methyltransferase 1
TC01000010	0.132848	-2.02317 RHEB_cKO down vs WT	-1.01662 -3σ	1 1 D	20725	20725 Serpinb8	serine (or cysteine) peptidase inhibitor, clade B, member 8
TC04000036	0.00472	-2.02366 RHEB_cKO down vs WT	-1.01696 -3σ	4 D2.3 4	269589	269589 Syt1	synaptotagmin-like 1
TC08000024	0.106495	-2.025 RHEB_cKO down vs WT	-1.01792 -3σ	8 B3.3 8	74015	74015 Fcho1	FCH domain only 1
TC01000012	0.033778	-2.02988 RHEB_cKO down vs WT	-1.0214 -3σ	1 E4 1 59.	21956	21956 Tnnt2	troponin T2, cardiac
TC01000008	0.117409	-2.0311 RHEB_cKO down vs WT	-1.02226 -3σ	---	---	Gm15374	predicted gene 15374
TC15000003	0.171427	-2.0313 RHEB_cKO down vs WT	-1.0224 -3σ	15 15 D	12818	12818 Col14a1	collagen, type XIV, alpha 1
TC11000039	0.011934	-2.03228 RHEB_cKO down vs WT	-1.0231 -3σ	11 D 11 6	21763	21763 Tex2	testis expressed gene 2
TC0X000003	0.006494	-2.03533 RHEB_cKO down vs WT	-1.02526 -3σ	X A3.2 X	75974	75974 Dock11	dedicator of cytokinesis 11
TC07000007	0.028353	-2.03597 RHEB_cKO down vs WT	-1.02572 -3σ	---	---	Gm2058	predicted gene 2058
TC0400000C	0.066135	-2.03637 RHEB_cKO down vs WT	-1.026 -3σ	---	---	A830012C	RIKEN cDNA A830012C17 gene
TC01000016	0.028538	-2.0374 RHEB_cKO down vs WT	-1.02673 -3σ	1 H4 1	226744	226744 Cnst	consortin, connexin sorting protein
TC06000021	0.052957	-2.04135 RHEB_cKO down vs WT	-1.02952 -3σ	6 B1 6	434008	434008 Tmem178	transmembrane protein 178B
TC03000024	0.046954	-2.04178 RHEB_cKO down vs WT	-1.02983 -3σ	3 3 F2	22156	22156 Tuft1	tuftelin 1
TC11000041	0.047099	-2.04296 RHEB_cKO down vs WT	-1.03066 -3σ	11 E2 11 8	21858	21858 Timp2	tissue inhibitor of metalloproteinase 2
TC04000022	0.365014	-2.04309 RHEB_cKO down vs WT	-1.03075 -3σ	4 A1 4	208890	208890 Slc26a7	solute carrier family 26, member 7
TC11000005	0.08305	-2.0438 RHEB_cKO down vs WT	-1.03125 -6σ	11 B3 11	80515	80515 Chd3os	chromodomain helicase DNA binding protein 3, opposite strand
TC16000008	0.01229	-2.04391 RHEB_cKO down vs WT	-1.03133 -6σ	16 16	387229	387229 Mir99a	microRNA 99a
TC10000031	0.010635	-2.04488 RHEB_cKO down vs WT	-1.03202 -6σ	---	---	Gm15900	predicted gene 15900
TC09000033	0.010197	-2.04896 RHEB_cKO down vs WT	-1.03489 -6σ	9 F 9 74.5	17281	17281 Fyco1	FYVE and coiled-coil domain containing 1
TC15000021	0.010743	-2.05031 RHEB_cKO down vs WT	-1.03584 -6σ	15 15 E	11883	11883 Arsa	arylsulfatase A
TC18000013	0.000356	-2.05137 RHEB_cKO down vs WT	-1.03659 -6σ	18 C 18	20358	20358 Sema6a	sema domain, transmembrane domain (TM), and cytoplasmic domain, (sema)
TC01000025	0.235587	-2.05253 RHEB_cKO down vs WT	-1.0374 -6σ	1 C3 1 36.	16011	16011 Igfbp5	insulin-like growth factor binding protein 5
TC03000011	0.046746	-2.05631 RHEB_cKO down vs WT	-1.04005 -6σ	---	---	Gm10961	predicted gene 10961
TC14000023	0.041196	-2.05747 RHEB_cKO down vs WT	-1.04087 -6σ	14 D2 14	213019	213019 Pdlim2	PDZ and LIM domain 2
TC19000013	0.002651	-2.05801 RHEB_cKO down vs WT	-1.04125 -6σ	19 C1 19 2	226090	226090 Ermp1	endoplasmic reticulum metallopeptidase 1
TC01000002	0.020142	-2.05872 RHEB_cKO down vs WT	-1.04174 -6σ	1 B 1 15.2	94220	94220 Cnnm4	cyclin M4
TC07000007	0.129367	-2.05928 RHEB_cKO down vs WT	-1.04214 -6σ	7 B4 7 28.	68668	68668 Klk5	kallikrein related-peptidase 5
TC18000008	0.000924	-2.05951 RHEB_cKO down vs WT	-1.0423 -6σ	18 E3 18	207259	207259 Zbtb7c	zinc finger and BTB domain containing 7C
TC14000010	0.006712	-2.06079 RHEB_cKO down vs WT	-1.0432 -6σ	14 D3 14 3	16432	16432 Itm2b	integral membrane protein 2B
TC17000003	0.039704	-2.06187 RHEB_cKO down vs WT	-1.04395 -6σ	17 A3.3 17	212733	212733 Ccdc64b	coiled-coil domain containing 64B
TC19000007	0.004285	-2.06248 RHEB_cKO down vs WT	-1.04438 -6σ	19 D2 19 4	18569	18569 Pdc4d	programmed cell death 4
TC03000008	0.067968	-2.06473 RHEB_cKO down vs WT	-1.04596 -6σ	3 F2.1 3	229574	229574 Flg2	filaggrin family member 2
TC05000023	0.000279	-2.06935 RHEB_cKO down vs WT	-1.04918 -6σ	5 B3 5	70693	70693 Adgra3	adhesion G protein-coupled receptor A3
TC01000035	0.068238	-2.0704 RHEB_cKO down vs WT	-1.04991 -6σ	1 H3 1	15490	15490 Hsd17b7	hydroxysteroid (17-beta) dehydrogenase 7
TC08000008	0.122033	-2.0706 RHEB_cKO down vs WT	-1.05005 -6σ	8 C1 8 35.	15368	15368 Hmox1	heme oxygenase 1
TC17000024	0.05036	-2.07362 RHEB_cKO down vs WT	-1.05215 -6σ	17 E1.1 17	19274	19274 Ptprm	protein tyrosine phosphatase, receptor type, M
TC19000016	0.053144	-2.07699 RHEB_cKO down vs WT	-1.05449 -6σ	19 C3 19 3	13074	13074 Cyp17a1	cytochrome P450, family 17, subfamily a, polypeptide 1
TC05000008	0.000315	-2.08701 RHEB_cKO down vs WT	-1.06144 -6σ	5 E2 5	231440	231440 Parm1	prostate androgen-regulated mucin-like protein 1
TC1300000C	0.093413	-2.09356 RHEB_cKO down vs WT	-1.06596 -6σ	13 A1 13 5	14706	14706 Gng4	guanine nucleotide binding protein (G protein), gamma 4
TC09000031	0.066736	-2.0984 RHEB_cKO down vs WT	-1.06929 -6σ	9 F3 9	70031	70031 Cmtm8	CKLF-like MARVEL transmembrane domain containing 8
TC11000027	0.034198	-2.09948 RHEB_cKO down vs WT	-1.07003 -6σ	11 B1.3 11	246049	246049 Slc36a2	solute carrier family 36 (proton/amino acid symporter), member 2
TC13000005	0.371694	-2.10091 RHEB_cKO down vs WT	-1.07101 -6σ	13 13 B1	66695	66695 Aspn	asporin
TC13000013	0.15148	-2.10191 RHEB_cKO down vs WT	-1.0717 -6σ	13 A1 13	70405	70405 Calml3	calmodulin-like 3
TC11000006	0.006155	-2.10281 RHEB_cKO down vs WT	-1.07232 -6σ	11 B1.3 11	215335	215335 Slc36a1	solute carrier family 36 (proton/amino acid symporter), member 1
TC07000027	0.004073	-2.10291 RHEB_cKO down vs WT	-1.07239 -6σ	7 B1 7	76718	76718 Catsperg2	catsper channel auxiliary subunit gamma 2
TC03000008	0.050686	-2.10303 RHEB_cKO down vs WT	-1.07247 -6σ	3 F2.1 3	99681	99681 Tchh	trichohyalin
TC0X000002	0.037458	-2.10326 RHEB_cKO down vs WT	-1.07263 -6σ	X A1.3 X	19733	19733 Rgn	regucalcin
TC11000037	0.031723	-2.10772 RHEB_cKO down vs WT	-1.07568 -6σ	11 D 11 6	268482	268482 Krt12	keratin 12
TC16000020	0.140028	-2.10846 RHEB_cKO down vs WT	-1.07619 -6σ	16 C3.3 16	71363	71363 Krtap7-1	keratin associated protein 7-1
TC03000024	0.139238	-2.10971 RHEB_cKO down vs WT	-1.07705 -6σ	3 F1 3	66195	66195 Lce1g	late cornified envelope 1G
TC05000028	0.331805	-2.11566 RHEB_cKO down vs WT	-1.08111 -6σ	5 E4 5 50.	13602	13602 Sparcl1	SPARC-like 1
TC05000010	0.001051	-2.11664 RHEB_cKO down vs WT	-1.08178 -6σ	5 F 5	433931	433931 Pigg	phosphatidylinositol glycan anchor biosynthesis, class G
TC14000023	0.000564	-2.1179 RHEB_cKO down vs WT	-1.08263 -6σ	14 D3 14 3	1.01E+08	1.01E+08 Gm20290	predicted gene, 20290
TC10000011	0.332483	-2.11833 RHEB_cKO down vs WT	-1.08293 -6σ	10 C3 10 5	17022	17022 Lum	lumican
TC15000022	0.228862	-2.1186 RHEB_cKO down vs WT	-1.083				

TC03000000E	0.001301	-2.1772 RHEB_cKO down vs WT	-1.12247 -6σ	3 3 F2	19885	19885 Rorc	RAR-related orphan receptor gamma
TC01000011	0.102276	-2.17891 RHEB_cKO down vs WT	-1.12361 -6σ	1 E4 1	226418	226418 Yod1	YOD1 OTU deubiquitinating enzyme 1 homologue (S. cerevisiae)
TC07000000E	0.004106	-2.18033 RHEB_cKO down vs WT	-1.12455 -6σ	7 B4 7	66065	66065 Hsd17b14	hydroxysteroid (17-beta) dehydrogenase 14
TC15000015	0.000293	-2.18398 RHEB_cKO down vs WT	-1.12696 -6σ	15 D1 15 :	20649	20649 Sntb1	syntrophin, basic 1
TC01000008	0.306842	-2.18502 RHEB_cKO down vs WT	-1.12765 -6σ	1 D 1	13345	13345 Twist2	twist basic helix-loop-helix transcription factor 2
TC10000016	0.016005	-2.18728 RHEB_cKO down vs WT	-1.12914 -6σ	10 A1 10	670558	670558 H60c	histocompatibility 60c
TC13000021	0.076425	-2.18751 RHEB_cKO down vs WT	-1.12929 -6σ	13 B1 13	114304	114304 Slc28a3	solute carrier family 28 (sodium-coupled nucleoside transporter), member 3
TC10000022	0.02305	-2.18813 RHEB_cKO down vs WT	-1.1297 -6σ	10 B4 10 :	20397	20397 Sgpl1	sphingosine phosphate lyase 1
TC03000024	0.117148	-2.18837 RHEB_cKO down vs WT	-1.12986 -6σ	3 F1 3	68720	68720 Lce1b	late cornified envelope 1B
TC02000002	0.025301	-2.18984 RHEB_cKO down vs WT	-1.13083 -6σ	2 A2-A3 2	67448	67448 Plxdc2	plexin domain containing 2
TC06000012	0.020492	-2.19112 RHEB_cKO down vs WT	-1.13172 -6σ	6 6	71779	71779 March8	membrane-associated ring finger (C3HC4) 8
TC12000019	0.002122	-2.19863 RHEB_cKO down vs WT	-1.13661 -6σ	12 C3 12	66375	66375 Dhrs7	dehydrogenase/reductase (SDR family) member 7
TC08000010	0.000563	-2.20453 RHEB_cKO down vs WT	-1.14047 -6σ	8 C3 8	66887	66887 Lonp2	Ion peptidase 2, peroxisomal
TC19000001	0.001804	-2.20736 RHEB_cKO down vs WT	-1.14232 -6σ	19 A 19	225898	225898 Eml3	echinoderm microtubule associated protein like 3
TC15000001	0.000709	-2.20815 RHEB_cKO down vs WT	-1.14284 -6σ	15 B1 15	223431	223431 Tiaf2	TGF-beta1-induced anti-apoptotic factor 2
TC03000028	0.001316	-2.2092 RHEB_cKO down vs WT	-1.14353 -6σ	3 G-H1 3 :	19299	19299 Abcd3	ATP-binding cassette, sub-family D (ALD), member 3
TC05000029	0.011368	-2.21074 RHEB_cKO down vs WT	-1.14453 -6σ	5 F 5	243197	243197 Mfsd7a	major facilitator superfamily domain containing 7A
TC01000009	0.066969	-2.21583 RHEB_cKO down vs WT	-1.14785 -6σ	1 D 1	404545	404545 Ano7	anoctamin 7
TC19000004	0.225603	-2.22127 RHEB_cKO down vs WT	-1.15138 -6σ	19 C1 19	70166	70166 Lipn	lipase, family member N
TC08000023	0.054128	-2.22272 RHEB_cKO down vs WT	-1.15233 -6σ	8 B3.1 8 3	12876	12876 Cpe	carboxypeptidase E
TC01000028	0.029058	-2.22333 RHEB_cKO down vs WT	-1.15272 -6σ	1 D 1	71874	71874 2310007B(RIKEN cDNA 2310007B03 gene	
TC1500000C	0.025011	-2.22808 RHEB_cKO down vs WT	-1.1558 -6σ	15 A1 15	223337	223337 Ugt3a2	UDP glycosyltransferases 3 family, polypeptide A2
TC1300000E	0.038675	-2.23245 RHEB_cKO down vs WT	-1.15863 -6σ	13 B-C1 1:	21810	21810 Tgfb1	transforming growth factor, beta induced
TC0X000033	0.011686	-2.23865 RHEB_cKO down vs WT	-1.16263 -6σ	X F5 X	76763	76763 Mospd2	motile sperm domain containing 2
TC1100003C	0.000967	-2.24113 RHEB_cKO down vs WT	-1.16423 -6σ	11 B3 11 :	11684	11684 Alox12	arachidonate 12-lipoxygenase
TC0500002E	0.258736	-2.24675 RHEB_cKO down vs WT	-1.16784 -6σ	5 E1 5	243083	243083 Tmprss11f	transmembrane protease, serine 11f
TC03000024	0.117025	-2.2468 RHEB_cKO down vs WT	-1.16787 -6σ	3 F1 3	73722	73722 Lce1a2	late cornified envelope 1A2
TC04000038	0.000459	-2.25018 RHEB_cKO down vs WT	-1.17004 -6σ	4 D3 4	68943	68943 Pink1	PTEN induced putative kinase 1
TC01000031	0.006054	-2.25543 RHEB_cKO down vs WT	-1.1734 -6σ	1 E4 1 58:	12227	12227 Btg2	B cell translocation gene 2, anti-proliferative
TC04000032	0.012275	-2.2603 RHEB_cKO down vs WT	-1.17652 -6σ	---	---	Gm12818	predicted gene 12818
TC19000012	0.00886	-2.26083 RHEB_cKO down vs WT	-1.17685 -6σ	19 B 19 1:	26358	26358 Aldh1a7	aldehyde dehydrogenase family 1, subfamily A7
TC09000007	0.223887	-2.26252 RHEB_cKO down vs WT	-1.17793 -6σ	9 B 9 31.6	13070	13070 Cyp11a1	cytochrome P450, family 11, subfamily a, polypeptide 1
TC14000013	0.007693	-2.26509 RHEB_cKO down vs WT	-1.17957 -6σ	14 E5 14	69634	69634 Clybl	citrate lyase beta like
TC03000008	0.190048	-2.26678 RHEB_cKO down vs WT	-1.18064 -6σ	3 F2.1 3	381457	381457 Crnn	cornulin
TC0900002E	0.014428	-2.26811 RHEB_cKO down vs WT	-1.18149 -6σ	9 D 9	64008	64008 Aqp9	aquaporin 9
TC04000019	0.014481	-2.26888 RHEB_cKO down vs WT	-1.18198 -6σ	4 E2 4	67087	67087 Cttnbp1	catenin beta interacting protein 1
TC08000004	0.0011	-2.26926 RHEB_cKO down vs WT	-1.18222 -6σ	8 A4 8	244416	244416 Ppp1r3b	protein phosphatase 1, regulatory (inhibitor) subunit 3B
TC1900001C	0.070469	-2.27195 RHEB_cKO down vs WT	-1.18393 -6σ	19 A 19	22287	22287 Scgb1a1	secretoglobin, family 1A, member 1 (uteroglobin)
TC1400002C	0.017752	-2.27209 RHEB_cKO down vs WT	-1.18402 -6σ	14 C2 14	29811	29811 Ndrg2	N-myc downstream regulated gene 2
TC03000011	0.019457	-2.273 RHEB_cKO down vs WT	-1.1846 -6σ	3 F2.3 3	72121	72121 Dennd2d	DENN/MADD domain containing 2D
TC03000024	0.024508	-2.27622 RHEB_cKO down vs WT	-1.18664 -6σ	3 F2.1 3	545551	545551 BC021767	cingulin pseudogene
TC03000024	0.15926	-2.27815 RHEB_cKO down vs WT	-1.18787 -6σ	3 F1 3	76585	76585 Lce1i	late cornified envelope 1I
TC03000021	0.201969	-2.28325 RHEB_cKO down vs WT	-1.19109 -6σ	3 E1 3	109222	109222 Rarres1	retinoic acid receptor responder (tarotene induced) 1
TC16000016	0.054399	-2.2896 RHEB_cKO down vs WT	-1.1951 -6σ	16 B5 16	433022	433022 Plcx2d	phosphatidylinositol-specific phospholipase C, X domain containing 2
TC03000024	0.041812	-2.29304 RHEB_cKO down vs WT	-1.19726 -6σ	---	---	Gm15264	predicted gene 15264
TC03000015	0.009426	-2.29666 RHEB_cKO down vs WT	-1.19954 -6σ	3 H4 3	433667	433667 Ankrd13c	ankyrin repeat domain 13c
TC03000004	0.019484	-2.29747 RHEB_cKO down vs WT	-1.20005 -6σ	3 D 3	67758	67758 Aadac	arylacetamide deacetylase (esterase)
TC04000014	0.000287	-2.29762 RHEB_cKO down vs WT	-1.20014 -6σ	4 D2.2 4	230726	230726 Rhbdl2	rhomboid, veinlet-like 2 (Drosophila)
TC11000027	0.038189	-2.29779 RHEB_cKO down vs WT	-1.20025 -6σ	---	---	Gm12220	predicted gene 12220
TC03000023	0.111396	-2.30765 RHEB_cKO down vs WT	-1.20643 -6σ	3 3	78382	78382 Lce6a	late cornified envelope 6A
TC03000023	0.124619	-2.30782 RHEB_cKO down vs WT	-1.20653 -6σ	3 F1 3 40:	16447	16447 IvI	involucrin
TC07000004	0.019862	-2.31655 RHEB_cKO down vs WT	-1.21198 -6σ	7 A3 7 14.	13088	13088 Cyp2b10	cytochrome P450, family 2, subfamily b, polypeptide 10
TC09000011	0.074425	-2.31664 RHEB_cKO down vs WT	-1.21204 -6σ	9 9 E3.2	23959	23959 Nt5e	5' nucleotidase, ecto
TC1600002C	0.012356	-2.3182 RHEB_cKO down vs WT	-1.21301 -6σ	16 C3.1 16	69699	69699 2310079G RIKEN cDNA 2310079G19 gene	
TC11000012	0.006744	-2.32196 RHEB_cKO down vs WT	-1.21534 -6σ	11 11 B5	217026	217026 Heatr6	HEAT repeat containing 6
TC01000029	0.005462	-2.33116 RHEB_cKO down vs WT	-1.22132 -6σ	1 1 E2	72999	72999 Insig2	insulin induced gene 2
TC03000008	0.007072	-2.33574 RHEB_cKO down vs WT	-1.22388 -6σ	3 F2.1 3 40	20342	20342 Selenbp2	selenium binding protein 2
TC13000015	0.076949	-2.33606 RHEB_cKO down vs WT	-1.22408 -6σ	---	---	Hsp25-ps1	heat shock protein 25, pseudogene 1
TC01000022	8.72E-05	-2.3406 RHEB_cKO down vs WT	-1.22688 -6σ	1 1 B	53945	53945 Slc40a1	solute carrier family 40 (iron-regulated transporter), member 1
TC03000004	0.002509	-2.34142 RHEB_cKO down vs WT	-1.22738 -6σ	3 E1 3	622434	622434 Arhgef26	Rho guanine nucleotide exchange factor (GEF) 26
TC05000005	0.010058	-2.34319 RHEB_cKO down vs WT	-1.22848 -6σ	5 E4 5	74596	74596 Cds1	CDP-diacylglycerol synthase 1
TC02000011	0.042796	-2.34338 RHEB_cKO down vs WT	-1.22859 -6σ	2 2 D	70599	70599 Ssfa2	sperm specific antigen 2
TC06000032	0.002066	-2.34361 RHEB_cKO down vs WT	-1.22873 -6σ	6 F3 6	677440	677440 Clec2j	C-type lectin domain family 2, member J
TC19000001	0.010439	-2.34841 RHEB_cKO down vs WT	-1.23169 -6σ	19 A 19	225845	225845 Pla2g16	phospholipase A2, group XVI
TC01000027	0.007468	-2.35304 RHEB					

TC07000021	0.012098	-2.42853	RHEB_cKO down vs WT	-1.28008 -6σ	7 F5 7	1.01E+08	1.01E+08	Bc1	brain cytoplasmic RNA 1
TC10000018	0.045753	-2.43004	RHEB_cKO down vs WT	-1.28098 -6σ	10 10 A2	56016	56016	Hebp2	heme binding protein 2
TC14000023	0.013856	-2.43305	RHEB_cKO down vs WT	-1.28276 -6σ	14 D2 14	268759	268759	9930012K11	RIKEN cDNA 9930012K11 gene
TC04000019	0.005782	-2.43659	RHEB_cKO down vs WT	-1.28486 -6σ	4 4 E1	71890	71890	Mad2l2	MAD2 mitotic arrest deficient-like 2
TC04000011	0.005248	-2.44088	RHEB_cKO down vs WT	-1.2874 -6σ	4 D1 4	320640	320640	Skint4	selection and upkeep of intraepithelial T cells 4
TC15000002	0.384561	-2.44441	RHEB_cKO down vs WT	-1.2893 -6σ	15 B3.1 15	107587	107587	Osr2	odd-skipped related 2
TC05000013	0.014474	-2.44613	RHEB_cKO down vs WT	-1.2905 -6σ	5 F 5 57.8	57816	57816	Tesc	tescalcin
TC04000016	0.008696	-2.44879	RHEB_cKO down vs WT	-1.29207 -6σ	4 D3 4 68.	71665	71665	Fuca1	fucosidase, alpha-L- 1, tissue
TCOX000005	0.000749	-2.45248	RHEB_cKO down vs WT	-1.29424 -6σ	X X C2	71584	71584	Gdpd2	glycerophosphodiester phosphodiesterase domain containing 2
TC10000020	0.002797	-2.46018	RHEB_cKO down vs WT	-1.29876 -6σ	10 B2 10 2	11630	11630	Aim1	absent in melanoma 1
TC05000003	0.001805	-2.46186	RHEB_cKO down vs WT	-1.29975 -6σ	5 B1 5	80911	80911	Acox3	acyl-Coenzyme A oxidase 3, pristanoyl
TC03000024	0.088657	-2.46822	RHEB_cKO down vs WT	-1.30347 -6σ	3 F1 3	67127	67127	Lce1a1	late cornified envelope 1A1
TCOX000021	0.033949	-2.46985	RHEB_cKO down vs WT	-1.30442 -6σ	X A4 X	208884	208884	Zdhhc9	zinc finger, DHHC domain containing 9
TC06000034	0.039421	-2.47301	RHEB_cKO down vs WT	-1.30627 -6σ	6 A1 6	170772	170772	Glccl1	glucocorticoid induced transcript 1
TC07000008	0.001934	-2.48552	RHEB_cKO down vs WT	-1.31355 -6σ	---	---	---	Gm14377	predicted gene 14377
TC10000025	0.003413	-2.48562	RHEB_cKO down vs WT	-1.31361 -6σ	10 C1 10	27375	27375	Tjp3	tight junction protein 3
TC05000026	0.105186	-2.4868	RHEB_cKO down vs WT	-1.31429 -6σ	5 5 D	16924	16924	Lnx1	ligand of numb-protein X 1
TC11000036	0.000877	-2.48804	RHEB_cKO down vs WT	-1.31501 -6σ	---	---	---	Gm11611	predicted gene 11611
TC04000032	0.005998	-2.48839	RHEB_cKO down vs WT	-1.31521 -6σ	4 D1 4	230612	230612	Slc5a9	solute carrier family 5 (sodium/glucose cotransporter), member 9
TC09000005	0.002441	-2.49209	RHEB_cKO down vs WT	-1.31735 -6σ	9 A5.2 9	59095	59095	Fxyd6	FXYD domain-containing ion transport regulator 6
TC07000006	0.00636	-2.50216	RHEB_cKO down vs WT	-1.32317 -6σ	7 B2 7	245886	245886	Ankrd27	ankyrin repeat domain 27 (VPS9 domain)
TC11000002	0.009222	-2.50944	RHEB_cKO down vs WT	-1.32736 -6σ	11 11 A4	216616	216616	Efemp1	epidermal growth factor-containing fibulin-like extracellular matrix protein 1
TC03000008	0.014518	-2.51599	RHEB_cKO down vs WT	-1.33113 -6σ	3 3	1E+08	1E+08	Sprr2a2	small proline-rich protein 2A2
TC03000024	0.025319	-2.53783	RHEB_cKO down vs WT	-1.34359 -6σ	3 F2.1 3 4	70737	70737	Cgn	cingulin
TC04000011	0.02117	-2.54007	RHEB_cKO down vs WT	-1.34487 -6σ	4 D1 4	639781	639781	Skint1	selection and upkeep of intraepithelial T cells 1
TC03000008	0.003747	-2.54401	RHEB_cKO down vs WT	-1.3471 -6σ	3 F2.1 3 4	20341	20341	Selenbp1	selenium binding protein 1
TC1400001C	0.114568	-2.54471	RHEB_cKO down vs WT	-1.3475 -6σ	14 14 D2	67516	67516	Kctd4	potassium channel tetramerisation domain containing 4
TSUnmappe	0.012715	-2.55336	RHEB_cKO down vs WT	-1.3524 -6σ	X;Y XY 75.	20905	20905	Sts	steroid sulfatase
TC03000024	0.141383	-2.56568	RHEB_cKO down vs WT	-1.35934 -6σ	3 F1 3	69611	69611	Lce1d	late cornified envelope 1D
TC04000004	0.041258	-2.56894	RHEB_cKO down vs WT	-1.36117 -6σ	4 B1 4	666060	666060	Frmfd1	FERM and PDZ domain containing 1
TC14000021	0.352033	-2.57326	RHEB_cKO down vs WT	-1.3636 -6σ	14 C3 14 2	17227	17227	Mcpt4	mast cell protease 4
TC13000024	0.018032	-2.57371	RHEB_cKO down vs WT	-1.36385 -6σ	13 D1 13	218461	218461	Pde8b	phosphodiesterase 8B
TC1700001C	0.029278	-2.57386	RHEB_cKO down vs WT	-1.36393 -6σ	---	---	---	Gm5815	predicted pseudogene 5815
TC09000032	0.009067	-2.57685	RHEB_cKO down vs WT	-1.36561 -6σ	9 F4 9	102566	102566	Ano10	anoctamin 10
TC11000027	0.033412	-2.57857	RHEB_cKO down vs WT	-1.36657 -6σ	11 B1.3 11	30805	30805	Slc22a4	solute carrier family 22 (organic cation transporter), member 4
TC07000014	0.024026	-2.58324	RHEB_cKO down vs WT	-1.36918 -6σ	7 E3 7	207278	207278	Fchsd2	FCH and double SH3 domains 2
TC01000025	0.065807	-2.58443	RHEB_cKO down vs WT	-1.36984 -6σ	---	---	---	Gm8080	predicted gene 8080
TC0900001C	0.003637	-2.58463	RHEB_cKO down vs WT	-1.36996 -6σ	9 E2 9	212531	212531	Sh3bggr2	SH3 domain binding glutamic acid-rich protein like 2
TC08000007	0.000956	-2.58838	RHEB_cKO down vs WT	-1.37205 -6σ	8 8 C1	72281	72281	Sh2d4a	SH2 domain containing 4A
TC0100003C	0.021788	-2.60262	RHEB_cKO down vs WT	-1.37997 -6σ	1 E4 1	14270	14270	Srgap2	SLIT-ROBO Rho GTPase activating protein 2
TC07000008	0.049674	-2.61392	RHEB_cKO down vs WT	-1.38622 -6σ	7 B4 7	67893	67893	Tmem86a	transmembrane protein 86A
TC14000027	0.143177	-2.62074	RHEB_cKO down vs WT	-1.38997 -6σ	14 E5 14	56643	56643	Slc15a1	solute carrier family 15 (oligopeptide transporter), member 1
TC16000001	0.01118	-2.62445	RHEB_cKO down vs WT	-1.39202 -6σ	---	74478	74478	Snx29	sorting nexin 29
TC13000027	0.043476	-2.6333	RHEB_cKO down vs WT	-1.39687 -6σ	13 A2 13	21638	21638	Tcrg-V4	T cell receptor gamma, variable 4
TC09000005	0.062307	-2.63534	RHEB_cKO down vs WT	-1.39799 -6σ	9 A5.3 9 2	16173	16173	Il18	interleukin 18
TC02000018	0.005407	-2.64328	RHEB_cKO down vs WT	-1.40233 -6σ	2 F1-F3 2	12010	12010	B2m	beta-2 microglobulin
TC07000027	0.004858	-2.64436	RHEB_cKO down vs WT	-1.4025 -6σ	7 B1 7	320225	320225	Catsperg1	catsper channel auxiliary subunit gamma 1
TC06000033	0.025776	-2.65362	RHEB_cKO down vs WT	-1.40796 -6σ	6 G1 6	67729	67729	Mansc1	MANSC domain containing 1
TC07000045	0.009791	-2.65902	RHEB_cKO down vs WT	-1.41089 -6σ	7 F5 7	71345	71345	Ano9	anoctamin 9
TC04000027	0.017257	-2.6626	RHEB_cKO down vs WT	-1.41284 -6σ	4 4 C1	67103	67103	Ptgr1	prostaglandin reductase 1
TC01000015	0.405785	-2.66285	RHEB_cKO down vs WT	-1.41297 -6σ	1 1 H2	56429	56429	Dpt	dermatopontin
TC07000035	0.002155	-2.6741	RHEB_cKO down vs WT	-1.41905 -6σ	7 7 D1	108116	108116	Slco3a1	solute carrier organic anion transporter family, member 3a1
TC15000002	0.054849	-2.67562	RHEB_cKO down vs WT	-1.41987 -6σ	15 B3.1 15	114128	114128	Laptm4b	lysosomal-associated protein transmembrane 4B
TC0800001C	0.089825	-2.67792	RHEB_cKO down vs WT	-1.42111 -6σ	8 C5 8 44.	17390	17390	Mmp2	matrix metallopeptidase 2
TC01000029	0.011474	-2.67869	RHEB_cKO down vs WT	-1.42153 -6σ	1E2.1 1	394252	394252	Serpibnd3	serine (or cysteine) peptidase inhibitor, clade B (ovalbumin), member 3D
TC01000023	0.08064	-2.68286	RHEB_cKO down vs WT	-1.42377 -6σ	1 C1.1 1	329154	329154	Ankrd44	ankyrin repeat domain 44
TC0300003C	0.015277	-2.68289	RHEB_cKO down vs WT	-1.42379 -6σ	3 H2 3	26377	26377	Dapp1	dual adaptor for phosphotyrosine and 3-phosphoinositides 1
TC03000024	0.128197	-2.68502	RHEB_cKO down vs WT	-1.42493 -6σ	3 F1 3	68694	68694	Lce1e	late cornified envelope 1E
TC04000032	0.0098	-2.69633	RHEB_cKO down vs WT	-1.431 -6σ	---	---	---	Gm12736	predicted gene 12736
TC02000005	0.048306	-2.69736	RHEB_cKO down vs WT	-1.43155 -6σ	2 B 2	108897	108897	Aif1l	allograft inflammatory factor 1-like
TC08000006	0.024334	-2.69822	RHEB_cKO down vs WT	-1.43201 -6σ	8 8				

TC06000012	0.019652	-2.88287	RHEB_cKO down vs WT	-1.52751 -6σ	6 E3 6 53.	212541	212541 Rho	rhodopsin
TC0400001C	0.011496	-2.88946	RHEB_cKO down vs WT	-1.5308 -6σ	4 C6 4 47.	13131	13131 Dab1	disabled 1
TC0900001C	0.028388	-2.89241	RHEB_cKO down vs WT	-1.53227 -6σ	9 E1 9 43.	17920	17920 Myo6	myosin VI
TC16000021	0.066462	-2.90791	RHEB_cKO down vs WT	-1.53998 -6σ	---	---	---	2310043M RIKEN cDNA 2310043M15 gene
TC17000003	0.340647	-2.90864	RHEB_cKO down vs WT	-1.54034 -6σ	17 A3.3 17	17229	17229 Tpsb2	tryptase beta 2
TC03000024	0.094665	-2.91922	RHEB_cKO down vs WT	-1.54558 -6σ	3 F1 3	67718	67718 Lce1h	late cornified envelope 1H
TC13000002	0.022106	-2.93163	RHEB_cKO down vs WT	-1.5517 -6σ	13 A3.1 13	14756	14756 Gpld1	glycosylphosphatidylinositol specific phospholipase D1
TC01000004	0.047144	-2.93777	RHEB_cKO down vs WT	-1.55472 -6σ	1 c1 1 28.	71872	71872 Aox4	aldehyde oxidase 4
TC01000025	0.095078	-2.95484	RHEB_cKO down vs WT	-1.56308 -6σ	1 E2.1 1	20248	20248 Serpinb3a	serine (or cysteine) peptidase inhibitor, clade B (ovalbumin), member 3A
TC18000016	0.051673	-2.97274	RHEB_cKO down vs WT	-1.5718 -6σ	18 E3 18	66255	66255 Hspb1l1	heat shock factor binding protein 1-like 1
TC17000014	0.004772	-2.97279	RHEB_cKO down vs WT	-1.57182 -6σ	---	---	Gm8597	predicted gene 8597
TC10000017	0.02658	-2.97343	RHEB_cKO down vs WT	-1.57213 -6σ	10 10 6.64	1.01E+08	1.01E+08 Gm20125	predicted gene, 20125
TC03000028	0.005068	-2.97931	RHEB_cKO down vs WT	-1.57498 -6σ	3 3 G3	99887	99887 Tmem56	transmembrane protein 56
TCOX000033	0.099853	-2.98038	RHEB_cKO down vs WT	-1.57549 -6σ	X F5 X 77.	54156	54156 Egfl6	EGF-like-domain, multiple 6
TC17000023	0.004587	-2.98216	RHEB_cKO down vs WT	-1.57636 -6σ	17 D 17	171168	171168 Acer1	alkaline ceramidase 1
TC05000025	0.002897	-2.98539	RHEB_cKO down vs WT	-1.57792 -6σ	5 C3.1 5	11980	11980 Atp8a1	ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1
TC03000008	0.041905	-2.99139	RHEB_cKO down vs WT	-1.58081 -6σ	---	1.03E+08	1.03E+08 Gm35439	predicted gene, 35439
TC04000004	0.019779	-2.99479	RHEB_cKO down vs WT	-1.58246 -6σ	4 A5 4	230085	230085 Phf24	PHD finger protein 24
TC11000035	0.061768	-2.99611	RHEB_cKO down vs WT	-1.58309 -6σ	11 C 11	74617	74617 Scpep1	serine carboxypeptidase 1
TC04000011	0.010744	-2.99708	RHEB_cKO down vs WT	-1.58356 -6σ	4 C7 4	230598	230598 Nrd1	nardilysin, N-arginine dibasic convertase, NRD convertase 1
TC15000001	0.049913	-3.00334	RHEB_cKO down vs WT	-1.58657 -6σ	15 B1 15	66270	66270 Fam134b	family with sequence similarity 134, member B
TC15000007	0.025176	-3.00364	RHEB_cKO down vs WT	-1.58671 -6σ	15 15 E3	116939	116939 Pnpla3	patatin-like phospholipase domain containing 3
TC06000023	0.032531	-3.01202	RHEB_cKO down vs WT	-1.59073 -6σ	6 6 27.26	110175	110175 Ggct	gamma-glutamyl cyclotransferase
TC04000011	0.002943	-3.02033	RHEB_cKO down vs WT	-1.59471 -6σ	4 D1 4	328505	328505 Skint7	selection and upkeep of intraepithelial T cells 7
TC11000037	0.017783	-3.02462	RHEB_cKO down vs WT	-1.59676 -6σ	11 D 11	66708	66708 Krtap3-2	keratin associated protein 3-2
TC14000005	0.008485	-3.02669	RHEB_cKO down vs WT	-1.59774 -6σ	14 C1 14	54159	54159 Rnase2b	ribonuclease, RNase A family, 2B (liver, eosinophil-derived neurotoxin)
TC0900001C	0.043741	-3.02804	RHEB_cKO down vs WT	-1.59838 -6σ	9 D 9	235493	235493 Fam214a	family with sequence similarity 214, member A
TC19000012	0.0025	-3.03161	RHEB_cKO down vs WT	-1.60008 -6σ	19 B 19	381217	381217 Fam189a2	family with sequence similarity 189, member A2
TC16000016	0.016099	-3.03311	RHEB_cKO down vs WT	-1.6008 -6σ	16 B5 16	212998	212998 BC016579	cDNA sequence, BC016579
TC10000025	0.017533	-3.03345	RHEB_cKO down vs WT	-1.60096 -6σ	10 C1 10	216190	216190 AppI2	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper c
TC11000004	0.028654	-3.03497	RHEB_cKO down vs WT	-1.60168 -6σ	11 A5 11	319767	319767 Atp10b	ATPase, class V, type 10B
TC04000034	0.021126	-3.03712	RHEB_cKO down vs WT	-1.6027 -6σ	4 D2.2 4	69780	69780 Smap2	small ArfGAP 2
TC07000044	0.005174	-3.04309	RHEB_cKO down vs WT	-1.60554 -6σ	7 7 F5	12176	12176 Bnip3	BCL2/adenovirus E1B interacting protein 3
TC05000003	0.055863	-3.04924	RHEB_cKO down vs WT	-1.60845 -6σ	5 B1 5	665270	665270 Plb1	phospholipase B1
TC0100001C	0.077676	-3.0706	RHEB_cKO down vs WT	-1.61852 -6σ	1 1 D	116872	116872 Serpinb7	serine (or cysteine) peptidase inhibitor, clade B, member 7
TC12000014	0.045867	-3.07444	RHEB_cKO down vs WT	-1.62032 -6σ	12 12 A3	68775	68775 Atp6v1c2	ATPase, H <sup>+</sup> transporting, lysosomal V1 subunit C2
TC17000021	0.039971	-3.08456	RHEB_cKO down vs WT	-1.62507 -6σ	17 B3 17	78249	78249 Adgrf4	adhesion G protein-coupled receptor F4
TC13000001	0.043518	-3.08579	RHEB_cKO down vs WT	-1.62564 -6σ	---	---	Gm11295	predicted gene 11295
TC04000021	0.003315	-3.09478	RHEB_cKO down vs WT	-1.62984 -6σ	4 A1 4	242285	242285 Sdr16c5	short chain dehydrogenase/reductase family 16C, member 5
TC04000032	0.002584	-3.09788	RHEB_cKO down vs WT	-1.63128 -6σ	4 D1 4	242627	242627 Skint5	selection and upkeep of intraepithelial T cells 5
TC03000024	0.086813	-3.0983	RHEB_cKO down vs WT	-1.63148 -6σ	3 F2 3	66203	66203 Lce1m	late cornified envelope 1M
TC11000012	0.003746	-3.1	RHEB_cKO down vs WT	-1.63227 -6σ	---	---	Gm11433	predicted gene 11433
TCOX000025	0.118286	-3.11986	RHEB_cKO down vs WT	-1.64148 -6σ	X E3 X	331524	331524 Xkrx	X-linked Kx blood group related, X-linked
TC01000038	0.003637	-3.12612	RHEB_cKO down vs WT	-1.64437 -6σ	1 B 1	78321	78321 Ankrd23	ankyrin repeat domain 23
TC1100000C	0.061186	-3.14001	RHEB_cKO down vs WT	-1.65077 -6σ	11 A1 11	75219	75219 Dusp18	dual specificity phosphatase 18
TC1300000C	0.009981	-3.17431	RHEB_cKO down vs WT	-1.66644 -6σ	13 A1 13	17101	17101 Lyst	lysosomal trafficking regulator
TC02000042	0.020565	-3.21598	RHEB_cKO down vs WT	-1.68526 -6σ	2 E3 2 54..	12359	12359 Cat	catalase
TC09000015	0.018413	-3.21774	RHEB_cKO down vs WT	-1.68605 -6σ	9 F3 9	73748	73748 Gadl1	glutamate decarboxylase-like 1
TC13000024	0.020443	-3.23537	RHEB_cKO down vs WT	-1.69393 -6σ	---	1.03E+08	1.03E+08 Gm32089	predicted gene, 32089
TC11000018	0.005254	-3.25924	RHEB_cKO down vs WT	-1.70454 -6σ	11 E2 11	69602	69602 Otop3	otopetrin 3
TCOX000027	0.110937	-3.26358	RHEB_cKO down vs WT	-1.70645 -6σ	X X C2	57385	57385 P2ry4	pyrimidinergic receptor P2Y, G-protein coupled, 4
TC05000004	0.047562	-3.26421	RHEB_cKO down vs WT	-1.70674 -6σ	5 B3 5	76943	76943 Psapl1	prosaposin-like 1
TC04000001	0.045243	-3.26937	RHEB_cKO down vs WT	-1.70901 -6σ	4 A3 4	14590	14590 Ggh	gamma-glutamyl hydrolase
TC03000014	0.015824	-3.27731	RHEB_cKO down vs WT	-1.71251 -6σ	---	---	Adh6b	alcohol dehydrogenase 6B (class V)
TC13000024	0.007206	-3.29474	RHEB_cKO down vs WT	-1.72017 -6σ	13 D1 13	15212	15212 Hexb	hexosaminidase B
TC07000036	0.008972	-3.30219	RHEB_cKO down vs WT	-1.72342 -6σ	7 D3 7	65098	65098 Zfand6	zinc finger, AN1-type domain 6
TC15000017	0.122902	-3.30657	RHEB_cKO down vs WT	-1.72533 -6σ	15 D3 15	57277	57277 Slrp1	secreted Ly6/Plaur domain containing 1
TC14000021	0.008075	-3.30877	RHEB_cKO down vs WT	-1.72629 -6σ	14 C3 14	68631	68631 Cryl1	crystallin, lambda 1
TC09000032	0.004505	-3.31859	RHEB_cKO down vs WT	-1.73057 -6σ	---	---	Gm26797	predicted gene, 26797
TC02000046	0.003884	-3.33254	RHEB_cKO down vs WT	-1.73662 -6σ	2 F3 2	74182	74182 Gpcpd1	glycerophosphocholine phosphodiesterase 1
TC11000001	0.020193	-3.33523	RHEB_cKO down vs WT	-1.73779 -6σ	11 A1 11	626870	626870 Gm11992	predicted gene 11992
TC11000003	0.045612	-3.35112	RHEB_cKO down vs WT	-1.74464 -6σ	11 A4 11	20868	20868 Stk10	serine/threonine kinase 10
TC12000022								

TC03000024	0.054365	-3.87193	RHEB_cKO down vs WT	-1.95305	-6σ	3 3 F2	71790	71790	Anxa9	annexin A9
TC07000004	0.07897	-3.88793	RHEB_cKO down vs WT	-1.959	-6σ	7 A3 7 15.	13090	13090	Cyp2b19	cytochrome P450, family 2, subfamily b, polypeptide 19
TC11000024	0.000592	-3.96062	RHEB_cKO down vs WT	-1.98573	-6σ	11 A4 11	216643	216643	Gabrp	gamma-aminobutyric acid (GABA) A receptor, pi
TC17000003	0.006454	-3.96094	RHEB_cKO down vs WT	-1.98584	-6σ	17 A3.3 17	27410	27410	Abca3	ATP-binding cassette, sub-family A (ABC1), member 3
TC07000025	0.026853	-3.96217	RHEB_cKO down vs WT	-1.98629	-6σ	7 B4 7 29.	50722	50722	Dkk1	dickkopf-like 1
TC1200001C	0.030656	-4.00325	RHEB_cKO down vs WT	-2.00117	-6σ	12 E 12 51	12652	12652	Chga	chromogranin A
TC08000011	0.083968	-4.01199	RHEB_cKO down vs WT	-2.00432	-6σ	8 D3 8	71903	71903	Ces2f	carboxylesterase 2F
TC04000032	0.012381	-4.04952	RHEB_cKO down vs WT	-2.01775	-6σ	4 D1 4	230613	230613	Skint10	selection and upkeep of intraepithelial T cells 10
TC0X000005	0.011144	-4.15559	RHEB_cKO down vs WT	-2.05505	-6σ	X C3 X	245533	245533	Awat1	acyl-CoA wax alcohol acyltransferase 1
TC0900003C	0.006445	-4.19241	RHEB_cKO down vs WT	-2.06778	≤ -6σ	9 F1 9 58.	76257	76257	Slc38a3	solute carrier family 38, member 3
TC08000005	0.019544	-4.29258	RHEB_cKO down vs WT	-2.10185	≤ -6σ	8 8 C3	71310	71310	Tbc1d9	TBC1 domain family, member 9
TC04000032	0.004465	-4.48222	RHEB_cKO down vs WT	-2.16421	≤ -6σ	4 D1 4	230622	230622	Skint6	selection and upkeep of intraepithelial T cells 6
TC02000045	0.076472	-4.50337	RHEB_cKO down vs WT	-2.17101	≤ -6σ	2 F 2 62.9	16175	16175	Il1a	interleukin 1 alpha
TC11000007	0.021182	-4.51402	RHEB_cKO down vs WT	-2.17441	≤ -6σ	11 B2 11 3	16515	16515	Kcnj12	potassium inwardly-rectifying channel, subfamily J, member 12
TC04000011	0.014375	-4.55217	RHEB_cKO down vs WT	-2.18655	≤ -6σ	4 D1 4	329919	329919	Skint2	selection and upkeep of intraepithelial T cells 2
TC10000024	0.021549	-4.60782	RHEB_cKO down vs WT	-2.20408	≤ -6σ	10 C1 10	12365	12365	Casp14	caspase 14
TC12000002	0.004303	-4.63035	RHEB_cKO down vs WT	-2.21112	≤ -6σ	---	407816	407816	BC023202	cDNA sequence BC023202
TC1100004C	0.035428	-4.70469	RHEB_cKO down vs WT	-2.2341	≤ -6σ	11 E1 11	217265	217265	Abca5	ATP-binding cassette, sub-family A (ABC1), member 5
TC03000008	0.0202	-4.72121	RHEB_cKO down vs WT	-2.23916	≤ -6σ	3 F1 3	1E+08	1E+08	Sprr2a3	small proline-rich protein 2A3
TC08000001	0.021832	-4.73975	RHEB_cKO down vs WT	-2.24481	≤ -6σ	8 A3 8 10.	52123	52123	Agpat5	1-acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase 5)
TC0800003C	0.014767	-4.91304	RHEB_cKO down vs WT	-2.29662	≤ -6σ	8 E4 8	74032	74032	Sdr42e1	short chain dehydrogenase/reductase family 42E, member 1
TC05000005	0.045286	-5.04732	RHEB_cKO down vs WT	-2.33552	≤ -6σ	5 C1 5 28.	20531	20531	Slc34a2	solute carrier family 34 (sodium phosphate), member 2
TC10000023	0.085121	-5.05488	RHEB_cKO down vs WT	-2.33768	≤ -6σ	10 10 B5.3	71733	71733	Susd2	sushi domain containing 2
TC06000015	0.00067	-5.08151	RHEB_cKO down vs WT	-2.34526	≤ -6σ	6 F3 6	70809	70809	Clec2g	C-type lectin domain family 2, member g
TC04000005	0.013863	-5.11751	RHEB_cKO down vs WT	-2.35544	≤ -6σ	---	---	---	Gm12436	predicted gene 12436
TC04000035	0.021081	-5.21732	RHEB_cKO down vs WT	-2.38331	≤ -6σ	4 E1 4	329993	329993	Gm438	predicted gene 438
TC1400002C	0.014236	-5.22352	RHEB_cKO down vs WT	-2.38502	≤ -6σ	14 B-C1 1	19752	19752	Rnase1	ribonuclease, RNase A family, 1 (pancreatic)
TC16000014	0.00925	-5.24403	RHEB_cKO down vs WT	-2.39068	≤ -6σ	16 B2 16	224079	224079	Atp13a4	ATPase type 13A4
TC07000004	0.005024	-5.25908	RHEB_cKO down vs WT	-2.39481	≤ -6σ	7 A3 7	13108	13108	Cyp2g1	cytochrome P450, family 2, subfamily g, polypeptide 1
TC04000011	0.009431	-5.27255	RHEB_cKO down vs WT	-2.3985	≤ -6σ	4 D1 4	195564	195564	Skint3	selection and upkeep of intraepithelial T cells 3
TC0200001E	0.000625	-5.28608	RHEB_cKO down vs WT	-2.4022	≤ -6σ	2 E3 2	269328	269328	Muc15	mucin 15
TC17000014	0.005265	-5.29328	RHEB_cKO down vs WT	-2.40416	≤ -6σ	17 A1 17 8	381058	381058	Unc93a	unc-93 homolog A (C. elegans)
TC0600001C	0.011056	-5.32506	RHEB_cKO down vs WT	-2.4128	≤ -6σ	6 D1 6	243535	243535	BC048671	cDNA sequence BC048671
TC18000012	0.048071	-5.54078	RHEB_cKO down vs WT	-2.47009	≤ -6σ	18 B3 18	225443	225443	Gm94	predicted gene 94
TC0400004C	0.001256	-5.57402	RHEB_cKO down vs WT	-2.47872	≤ -6σ	4 E2 4	12353	12353	Car6	carbonic anhydrase 6
TC10000011	0.025598	-5.58734	RHEB_cKO down vs WT	-2.48216	≤ -6σ	10 C2-D1 1	15109	15109	Hal	histidine ammonia lyase
TC13000004	0.007846	-5.62003	RHEB_cKO down vs WT	-2.49058	≤ -6σ	13 13 14.3	1.01E+08	1.01E+08	Gm19865	predicted gene, 19865
TC0700004C	0.023221	-5.79831	RHEB_cKO down vs WT	-2.53563	≤ -6σ	7 E3 7	244202	244202	Nlrp10	NLR family, pyrin domain containing 10
TC07000034	0.028944	-5.83652	RHEB_cKO down vs WT	-2.54511	≤ -6σ	7 C 7	67867	67867	Lrrc28	leucine rich repeat containing 28
TC01000034	0.032147	-5.85961	RHEB_cKO down vs WT	-2.5508	≤ -6σ	1 1 H1	55990	55990	Fmo2	flavin containing monooxygenase 2
TC11000012	0.015846	-5.91921	RHEB_cKO down vs WT	-2.5654	≤ -6σ	11 C 11	66107	66107	Wfdc21	WAP four-disulfide core domain 21
TC03000008	0.03535	-5.96672	RHEB_cKO down vs WT	-2.57694	≤ -6σ	3 3 F2	66198	66198	Them5	thioesterase superfamily member 5
TC14000004	0.007535	-6.09067	RHEB_cKO down vs WT	-2.6066	≤ -6σ	---	---	---	Gm16439	predicted pseudogene 16439
TC06000017	0.031542	-6.16782	RHEB_cKO down vs WT	-2.62476	≤ -6σ	6 G3 6	330450	330450	Far2	fatty acyl CoA reductase 2
TC08000013	0.000847	-6.31305	RHEB_cKO down vs WT	-2.65834	≤ -6σ	8 E1 8	209239	209239	Gan	giant axonal neuropathy
TC02000006	0.011905	-6.52146	RHEB_cKO down vs WT	-2.7052	≤ -6σ	---	---	---	Gm13536	predicted gene 13536
TC02000043	0.000821	-6.53526	RHEB_cKO down vs WT	-2.70825	≤ -6σ	2 E3 2	170442	170442	Bbox1	butyrobetaine (gamma), 2-oxoglutarate dioxygenase 1 (gamma-butyrobetaine dioxygenase)
TC03000014	0.006757	-6.63564	RHEB_cKO down vs WT	-2.73024	≤ -6σ	3 G3 3 64.	11522	11522	Adh1	alcohol dehydrogenase 1 (class I)
TC05000013	0.000276	-7.14073	RHEB_cKO down vs WT	-2.83607	≤ -6σ	5 F 5 60.6	243262	243262	Oas1f	2'-5' oligoadenylate synthetase 1F
TC08000013	0.000949	-7.1534	RHEB_cKO down vs WT	-2.83863	≤ -6σ	---	---	---	Gm20204	predicted gene, 20204
TC0100003E	0.01914	-7.26425	RHEB_cKO down vs WT	-2.86081	≤ -6σ	1 1 E1-E2	381286	381286	Serpinb3c	serine (or cysteine) peptidase inhibitor, clade B, member 3C
TC15000017	0.027046	-7.41249	RHEB_cKO down vs WT	-2.88996	≤ -6σ	15 D3 15	69462	69462	2300005B	RIKEN cDNA 2300005B03 gene
TC11000006	0.016477	-8.08311	RHEB_cKO down vs WT	-3.01491	≤ -6σ	11 B1.3 11	73988	73988	4930438A01	RIKEN cDNA 4930438A08 gene
TC01000032	0.002413	-8.13554	RHEB_cKO down vs WT	-3.02424	≤ -6σ	1 1 G2	74091	74091	Npl	N-acetylneuraminate pyruvate lyase
TC02000008	0.006117	-8.15908	RHEB_cKO down vs WT	-3.02841	≤ -6σ	2 2 C3	76747	76747	Dapl1	death associated protein-like 1
TC08000014	0.006037	-8.53742	RHEB_cKO down vs WT	-3.0938	≤ -6σ	8 E1 8	15486	15486	Hsd17b2	hydroxysteroid (17-beta) dehydrogenase 2
TC17000014	0.004599	-9.00995	RHEB_cKO down vs WT	-3.17152	≤ -6σ					