

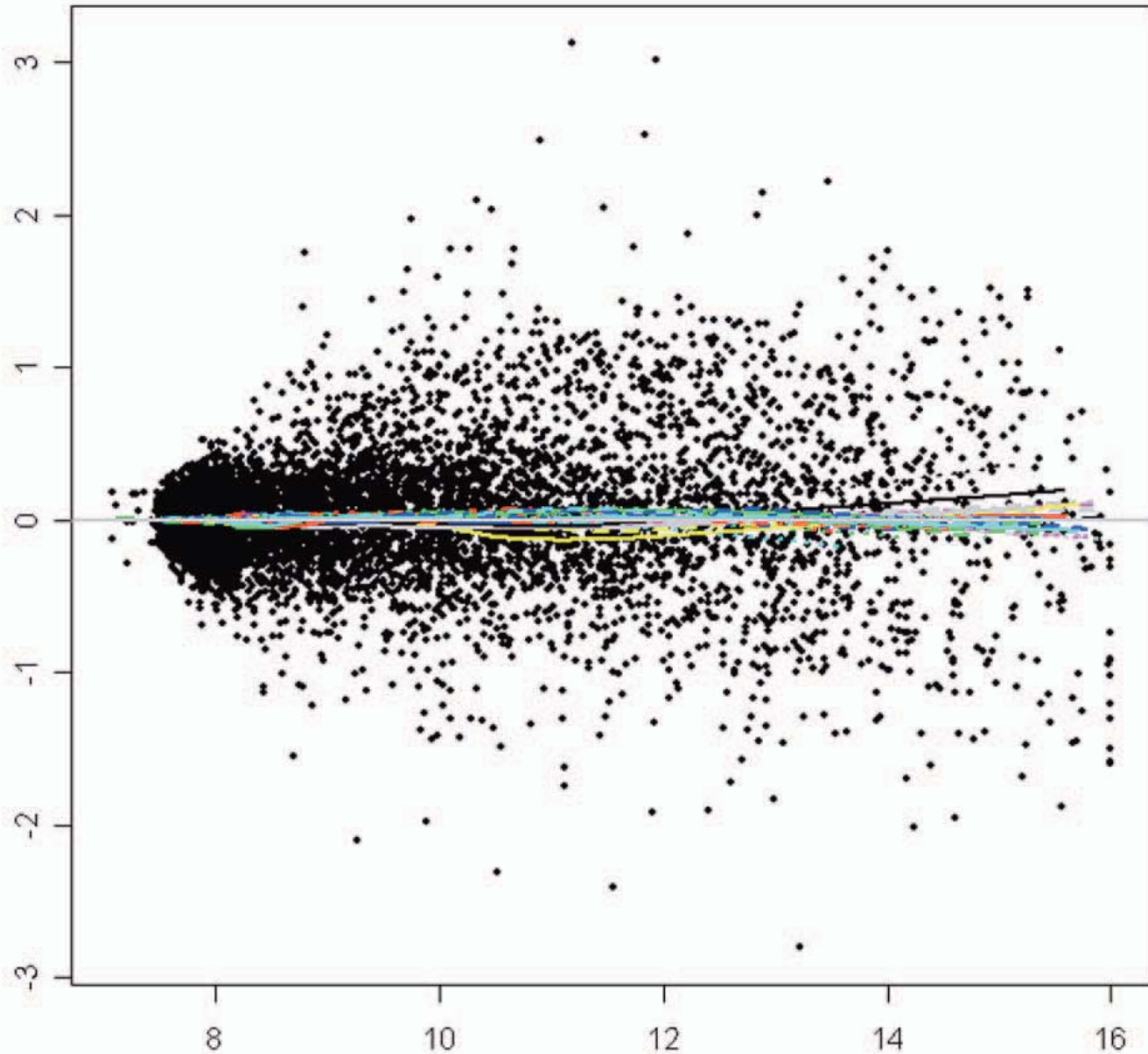
Suppl. Figure Legends

Suppl. Figure 1. Gene expression profiling of myrAkt1 transgenic mice. Total RNA was prepared from islets isolated from 4- to 6-week old non-transgenic and myrAkt1 transgenic mice (n=3 per genotype). The RNA was amplified, labeled, and hybridized to the PancChip 4.0 cDNA microarray. The graph represents a scatterplot of fold change in gene expression versus average intensity. Approximately 2.1% of expressed genes (76 significantly up-regulated and 69 significantly down-regulated) were differentially expressed in the myrAkt1 transgenic islets.

Suppl. Figure 2. Functional clustering of genes differentially regulated in the myrAkt1 transgenic islets compared to non-transgenic islets. A) The numbers of genes within a particular gene family that were up-regulated in the array. B) The numbers of genes within a particular gene family that were down-regulated in the array.

Suppl. Figure 3. Comparison of the Gene Networks affected in Metabolic Disease, Endocrine System Disorders, and Cell-to-Cell Signaling. A) myrAkt1 transgenic islets and B) islets isolated from 14.5 dpc pregnant mice. Red shading indicates increased expression; green shading indicates decreased expression. Gray shading indicates the change in expression is below the significance threshold and no shading indicates the gene is present only due to the presence of a connection reported in the literature. The intensity of shading reflects fold change in gene expression- the darker the shading the higher or lower the fold change compared to non-transgenic islets.

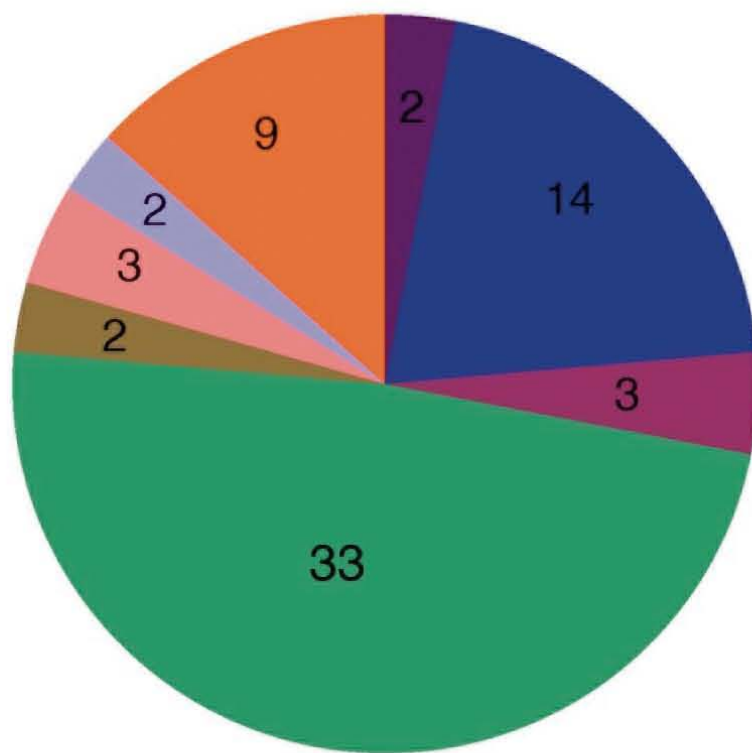
**M-Value
(Log2-Fold Change)**



A-Value

(mean log-expression level)

Suppl. Figure 1

A

Cytokine

Enzymes

Kinases

Other

Peptidases

Transcriptional regulators

transmembrane receptor

Transporters

Enzymes

Kinases

Other

Peptidases

Transcriptional regulators

transmembrane receptor

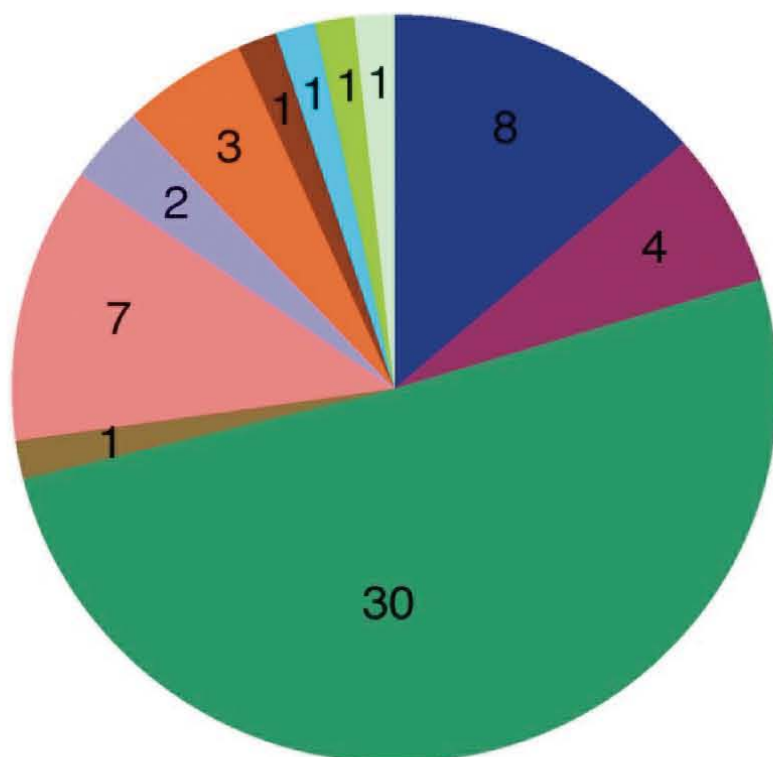
Transporters

Translational regulator

Phosphatase

Ligand-dependent nuclear receptor

G-protein coupled receptor

B

Enzymes

Kinases

Other

Peptidases

Transcriptional regulators

transmembrane receptor

Transporters

Translational regulator

Phosphatase

Ligand-dependent nuclear receptor

G-protein coupled receptor

