

Figure 1 displays a multi-panel plot showing gene expression data for 18,256 genes. The x-axis represents the Gene List Index (0 to 18,256) and the Number of genes (18,256 in list, 114 in gene set).

The top panel shows the log<sub>2</sub>(RPKM) expression level (blue line) across the gene list. A dashed horizontal line indicates the zero level. A green vertical line marks the "Zero crossing at 10356", and a blue vertical line marks the "Peak at 14073".

The middle panel shows the expression level (black vertical bars) for individual genes, with a dense cluster of genes showing high expression between indices 10,000 and 15,000.

The bottom panel shows the distribution of genes (green area plot). The area is divided into two regions: "clus1" (left) and "NON.clus1" (right).

A density plot showing the distribution of ES values for two gene sets. The x-axis is labeled 'ES' and ranges from -0.5 to 0.5. The y-axis is labeled 'P(ES)' and ranges from 0.0 to 2.0. A red curve represents the 'Gene Set Null Density', which is bimodal with peaks around -0.3 and 0.3. A vertical black line at ES = -0.341 represents the 'Observed Gene Set ES value'. The area to the left of this line is labeled 'Neg. ES "NON.clus1"' and the area to the right is labeled 'Pos. ES: "clus1"'. Below the plot, the following statistics are provided: ES = -0.341, NES = -1.08, Nom. p-val= 0.407, FWER= 1, FDR= 0.564.

The figure displays a heatmap of gene expression data. The y-axis lists 100 genes, and the x-axis represents 100 samples. The samples are divided into two groups: 'clus1' (samples 1-50) and 'NON.clus1' (samples 51-100). The color scale ranges from -2 (blue) to 2 (red), with 0 being white. The heatmap shows a clear separation of gene expression patterns between the two groups, with many genes showing high expression in the 'clus1' group and low expression in the 'NON.clus1' group, and vice versa for other genes.

**clus1** **NON.clus1**

Gene list (from top to bottom):

- Clus1
- ATPV04A
- ATPV01C
- ATPV01E
- ATPV01D
- ATPV01B
- ATPV01A
- ATPV01F
- ATPV01G
- ATPV01H
- ATPV01I
- ATPV01J
- ATPV01K
- ATPV01L
- ATPV01M
- ATPV01N
- ATPV01O
- ATPV01P
- ATPV01Q
- ATPV01R
- ATPV01S
- ATPV01T
- ATPV01U
- ATPV01V
- ATPV01W
- ATPV01X
- ATPV01Y
- ATPV01Z
- ATPV02A
- ATPV02B
- ATPV02C
- ATPV02D
- ATPV02E
- ATPV02F
- ATPV02G
- ATPV02H
- ATPV02I
- ATPV02J
- ATPV02K
- ATPV02L
- ATPV02M
- ATPV02N
- ATPV02O
- ATPV02P
- ATPV02Q
- ATPV02R
- ATPV02S
- ATPV02T
- ATPV02U
- ATPV02V
- ATPV02W
- ATPV02X
- ATPV02Y
- ATPV02Z
- ATPV03A
- ATPV03B
- ATPV03C
- ATPV03D
- ATPV03E
- ATPV03F
- ATPV03G
- ATPV03H
- ATPV03I
- ATPV03J
- ATPV03K
- ATPV03L
- ATPV03M
- ATPV03N
- ATPV03O
- ATPV03P
- ATPV03Q
- ATPV03R
- ATPV03S
- ATPV03T
- ATPV03U
- ATPV03V
- ATPV03W
- ATPV03X
- ATPV03Y
- ATPV03Z
- ATPV04A
- ATPV04B
- ATPV04C
- ATPV04D
- ATPV04E
- ATPV04F
- ATPV04G
- ATPV04H
- ATPV04I
- ATPV04J
- ATPV04K
- ATPV04L
- ATPV04M
- ATPV04N
- ATPV04O
- ATPV04P
- ATPV04Q
- ATPV04R
- ATPV04S
- ATPV04T
- ATPV04U
- ATPV04V
- ATPV04W
- ATPV04X
- ATPV04Y
- ATPV04Z
- ATPV05A
- ATPV05B
- ATPV05C
- ATPV05D
- ATPV05E
- ATPV05F
- ATPV05G
- ATPV05H
- ATPV05I
- ATPV05J
- ATPV05K
- ATPV05L
- ATPV05M
- ATPV05N
- ATPV05O
- ATPV05P
- ATPV05Q
- ATPV05R
- ATPV05S
- ATPV05T
- ATPV05U
- ATPV05V
- ATPV05W
- ATPV05X
- ATPV05Y
- ATPV05Z
- ATPV06A
- ATPV06B
- ATPV06C
- ATPV06D
- ATPV06E
- ATPV06F
- ATPV06G
- ATPV06H
- ATPV06I
- ATPV06J
- ATPV06K
- ATPV06L
- ATPV06M
- ATPV06N
- ATPV06O
- ATPV06P
- ATPV06Q
- ATPV06R
- ATPV06S
- ATPV06T
- ATPV06U
- ATPV06V
- ATPV06W
- ATPV06X
- ATPV06Y
- ATPV06Z
- ATPV07A
- ATPV07B
- ATPV07C
- ATPV07D
- ATPV07E
- ATPV07F
- ATPV07G
- ATPV07H
- ATPV07I
- ATPV07J
- ATPV07K
- ATPV07L
- ATPV07M
- ATPV07N
- ATPV07O
- ATPV07P
- ATPV07Q
- ATPV07R
- ATPV07S
- ATPV07T
- ATPV07U
- ATPV07V
- ATPV07W
- ATPV07X
- ATPV07Y
- ATPV07Z
- ATPV08A
- ATPV08B
- ATPV08C
- ATPV08D
- ATPV08E
- ATPV08F
- ATPV08G
- ATPV08H
- ATPV08I
- ATPV08J
- ATPV08K
- ATPV08L
- ATPV08M
- ATPV08N
- ATPV08O
- ATPV08P
- ATPV08Q
- ATPV08R
- ATPV08S
- ATPV08T
- ATPV08U
- ATPV08V
- ATPV08W
- ATPV08X
- ATPV08Y
- ATPV08Z
- ATPV09A
- ATPV09B
- ATPV09C
- ATPV09D
- ATPV09E
- ATPV09F
- ATPV09G
- ATPV09H
- ATPV09I
- ATPV09J
- ATPV09K
- ATPV09L
- ATPV09M
- ATPV09N
- ATPV09O
- ATPV09P
- ATPV09Q
- ATPV09R
- ATPV09S
- ATPV09T
- ATPV09U
- ATPV09V
- ATPV09W
- ATPV09X
- ATPV09Y
- ATPV09Z
- ATPV10A
- ATPV10B
- ATPV10C
- ATPV10D
- ATPV10E
- ATPV10F
- ATPV10G
- ATPV10H
- ATPV10I
- ATPV10J
- ATPV10K
- ATPV10L
- ATPV10M
- ATPV10N
- ATPV10O
- ATPV10P
- ATPV10Q
- ATPV10R
- ATPV10S
- ATPV10T
- ATPV10U
- ATPV10V
- ATPV10W
- ATPV10X
- ATPV10Y
- ATPV10Z