

Figure 1 displays a multi-panel plot showing gene expression data for 18,170 genes. The x-axis represents the Gene List Index, ranging from 0 to 18,170. The y-axis represents the log<sub>2</sub>(RPKM) expression level.

The top panel shows a blue line plot of log<sub>2</sub>(RPKM) expression. A dashed horizontal line indicates a threshold at log<sub>2</sub>(RPKM) = 1. The plot shows a general downward trend, followed by a sharp increase starting around index 14,000. Key features are marked: "Zero crossing at 11024" (indicated by a green vertical dashed line) and "Peak at 14416" (indicated by a blue vertical dashed line).

The middle panel shows a barcode representation of gene expression, with vertical lines indicating the presence of genes at specific indices.

The bottom panel shows a green area plot representing the distribution of genes. The area is shaded green, indicating the density of genes at each index. The distribution is skewed towards the right, with a peak around index 14,000.

The x-axis is labeled "Gene List Index" and "Number of genes: 18170 (in list), 83 (in gene set)". The y-axis is labeled "log<sub>2</sub>(RPKM)" and "Expression level".

Gene Set Null Density

Observed Gene Set ES value

P(ES)

Neg. ES "NON.clus1"

Pos. ES: "clus1"

ES

ES = -0.447 NES = -1.62 Nom. p-val= 0.0348 FWER= 0.674 FDR= 0.253

Heatmap visualization showing gene expression data across 100 samples. The y-axis lists 100 genes, and the x-axis shows two clusters: **clus1** (red bar) and **NON.clus1** (blue bar). The heatmap displays varying levels of expression (red for high, blue for low) for each gene across the samples.

Gene list (Y-axis):

- Class1
- NOF
- AKT3
- BCL2
- PRKAR2B
- PIK3R1
- PRKACB
- PIK3C
- PIK3R3
- IL13RA
- DFFB
- CASP6
- PRKAR1B
- TRIS
- BAX
- IL1F1
- PPP3CB
- PIK3R2
- PIK3CA
- PPP3R1
- ATM
- AFM1
- EXOG
- AKT11
- PIK3CB
- MD
- BAD
- CYC3
- IRAK4
- AKT2
- PRKAR1A
- PPP3CA
- DFPA
- CASP9
- IKBK8
- ICL1L1
- ADAF1
- PRKACA
- RELA
- CASP9
- MAP3K14
- XAP
- IKBK6
- CHUK
- PPP3CC
- IRAK1
- RIPK1
- IL1F2
- CASP8
- MYD88
- PIK3R5
- EXOG
- CSPG8
- ENDOD1
- TNFRSF1A
- CAPN1
- CHP
- NFKB1
- TAD
- CFLAR
- BIRC2
- PRKAR2A
- MYD88
- CASP7
- CHP2
- TNFRSF10B
- TRADD
- IRAK3
- TNFRSF10C
- CAPN2
- TNFRSF10
- PIK3CG
- NTRK1
- PIK3CD
- IL1RAP
- TNF
- FAS
- TNFRSF10D
- TNFRSF10A
- IL1B
- CASP10
- BIRC3
- IRAK2
- IL1A