

Figure 1 displays a multi-panel plot showing gene expression data across a Gene List Index (0 to 18,170).

The top panel shows the $\log_2(\text{RPKM})$ expression level (red line) versus the Gene List Index. The expression peaks at 2527 and crosses zero at 8325. A dashed horizontal line indicates the zero level.

The middle panel shows a barcode representation of the gene list, with vertical lines indicating the presence of genes. The label "Peak at 2527" is positioned above the peak, and "Zero crossing at 8325" is positioned above the zero crossing.

The bottom panel shows the $\log_2(\text{RPKM})$ expression level (green area) versus the Gene List Index. The area is divided into two regions: "clus2" (left) and "NON.clus2" (right).

Number of genes: 18170 (in list), 92 (in gene set)

A density plot showing the distribution of ES values. The x-axis is labeled 'ES' and ranges from -0.6 to 0.6. The y-axis is labeled 'P(ES)' and ranges from 0 to 4. A red curve represents the 'Gene Set Null Density', which is bimodal with peaks at approximately -0.25 and 0.25. A vertical black line represents the 'Observed Gene Set ES value' at approximately 0.397. The area under the red curve to the left of the observed value is shaded light red, and the area to the right is shaded light blue. Text labels 'Neg. ES "NON.clus2"' and 'Pos. ES: "clus2"' are placed below the x-axis. At the bottom, statistical values are provided: ES = 0.397 NES = 1.44 Nom. p-val= 0.0291 FWER= 0.953 FDR= 0.551.

Heatmap visualization showing gene expression patterns across two clusters: **clus2** and **NON.clus2**. The y-axis lists genes, and the x-axis represents individual samples. The color scale ranges from -2 (blue) to 2 (red).

Genes listed on the y-axis (from top to bottom):

- CNA8
- CALML3
- CALML5
- PLA2G3
- PLA2G4E
- GRHR
- PLA2G2F
- PLA2G2D
- PRK2
- HBEGF
- EGF
- PRKCB
- PLA2G8
- ITPR1
- GNRH1
- ADCT1
- CACNA2A
- MAP2K4
- PLCB2
- PRK2
- PTK2B
- JUN
- SRC
- CALML6
- SOS2
- CACNA2D
- MAPK11
- MAPK12
- MAP2K4
- CAMK2G
- CDC42
- GNA11
- MAPK8
- MAPK9
- MAPK7
- PLA2G2A
- PRKCD
- JNK2
- MAP2K7
- SOS1
- MAP3K4
- RAF1
- MAPK1
- MAPK3
- CALM1
- NRAS
- PRKACB
- MAPK1
- JNK1
- ELK1
- KAR1
- PLCB3
- MAPK14
- MAP2K2
- ITPR2
- MAPK3
- GNRH2
- PLA2G5
- CACNA1F
- PLA2G1A
- ADCT4
- ITP1
- ADCT5
- ADCT6
- MAPK9
- CACNA1D
- MBP2
- PLA2G1A
- PLA2G6
- CALM2
- ITPR3
- ADCT1
- MAP2K3
- PLCB1
- CALM3
- CNA5
- CACNA1C
- SOC1
- MAP2K6
- CAMK2B
- PRK2
- ADCT2
- ITP2
- CSA
- PLA2G10
- PLA2G10
- MAPK12
- PLCB4