

Figure 1 displays a multi-panel plot illustrating gene set enrichment analysis results. The x-axis represents the Gene List Index (0 to 18,361) and the Number of genes (18,361 in list, 66 in gene set).

The top panel shows the Enrichment Score (ES) curve (blue line). The curve starts at a high value, decreases steadily, and then rises sharply after index 15,000. A vertical green dashed line marks the "Zero crossing at 5765", and a vertical blue dashed line marks the "Peak at 15271".

The middle panel shows a barcode plot representing the distribution of genes in the gene set across the gene list index. The plot shows a dense cluster of genes (vertical lines) between indices 5,000 and 10,000, and a sparser distribution elsewhere.

The bottom panel shows the Enrichment Score (ES) for the gene set (green area). The area is labeled "clus3" and "NON.clus3". The plot shows a sharp peak in the ES at the beginning of the gene list (index 0) and a gradual decline towards the end (index 18,361).

A density plot showing the probability density function (PDF) of ES values for two gene sets: "NON.clus3" (negative ES) and "clus3" (positive ES). The x-axis is labeled "ES" and ranges from approximately -1.0 to 1.0. 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 at approximately -0.3 and 0.3. A vertical black line at ES = -0.684 represents the "Observed Gene Set ES value". The plot is annotated with "Neg. ES 'NON.clus3'" on the left and "Pos. ES: 'clus3'" on the right. Below the plot, the following statistics are provided: ES = -0.684, NES = -1.71, Nom. p-val = 0.00195, FWER = 0.482, and FDR = 0.681.

Heatmap visualization showing gene expression patterns across two clusters: **clus3** and **NON.clus3**. The y-axis lists 60 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):

- Class
- TNNI2
- SLC9A1
- UQCRCQ
- COX6C
- UQCRCB
- COX6B1
- COX7A2
- COX7B
- ATP1B3
- UQCRRHL
- COX4H
- UQCRC1
- TPM4
- COX8A
- TNNI3
- ATP1A1
- UQCRC1
- COX6A1
- UQCRCF1
- UQCRC10
- UQCRC1
- COX7C
- TPM3
- CYC1
- COX5A
- SLC9A6
- COX5B
- COX7A2L
- ATP2A2
- CACNB3
- COX6B2
- CACNG7
- FXYD2
- CACNG4
- TPM1
- COX4I2
- ATP1B1
- RYR2
- TPM2
- SLC8A1
- CACNA1C
- ATP1A3
- ACT1
- ATP1A4
- COX7A1
- CACNA2D3
- CACNB2
- MYL2
- MYH7
- CACNA1F
- ATP1B2
- ATP1B4
- CACNG1
- TNNI1
- CACNA1S
- CACNB4
- COX6A2
- MYH6
- CACNA2D4
- CACNA10
- CACNA2D2
- MYL3
- CACNG6
- ATP1A2
- CACNA2D1
- CACNB1