

Figure 1 displays a multi-panel plot showing gene expression data for the "clus3" cluster. The x-axis represents the Gene List Index (0 to 18,646) and the y-axis represents expression values (-1.0 to 0.4).

The top panel shows a red line plot of expression values. The line starts at 0, rises to a peak of approximately 0.35 at index 2,777, and then gradually declines, crossing zero at index 10,679. A horizontal dashed line is at y=0.

The middle panel shows vertical black bars representing gene expression levels across the same index, with a dense cluster of bars between index 0 and 2,000.

The bottom panel is a green area plot showing the distribution of gene expression levels, with a peak at index 2,777. The area is labeled "clus3" on the left and "NON.clus3" on the right.

Annotations include "Peak at 2777" and "Zero crossing at 10679".

Number of genes: 18646 (in list), 65 (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 0.361. The area under the red curve to the right of this line is shaded in light red. Text labels on the x-axis indicate 'Neg. ES "NON.clus3"' for negative values and 'Pos. ES: "clus3"' for positive values. At the bottom, statistical results are provided: ES = 0.361, NES = 1.29, Nom. p-val = 0.104, FWER = 0.978, and FDR = 0.94.

Heatmap visualization showing gene expression profiles across 100 samples, categorized into two groups: **clus3** (left) and **NON.clus3** (right). The y-axis lists 100 genes, and the x-axis lists 100 samples. The color scale ranges from -2 (blue) to 2 (red).

**Gene List (Y-axis):**

- Class
- PRKCO
- POMC
- PCK1
- PPARGC1A
- IRS2
- IRS4
- CPT1C
- MAPK10
- NPY
- TNF
- AGRP
- IRS1
- PRKAA2
- SLC2A1
- MAPK8
- SLC2A4
- MAPK9
- GGPC
- CPT1B
- NFKBIE
- CAMKK1
- AKT3
- TRAF2
- PRKAB1
- PRKAG2
- TNFRSF1A
- AKT2
- ADIPOR2
- IKKB
- PRKAA1
- MTOR
- LEPR
- RXR
- STAT3
- XXRA
- CAMKK2
- AKT1
- ACSL3
- NFKB1
- SOCS3
- PTPN11
- PPARA
- RELA
- ACSL4
- CHUK
- NFKBIA
- TRAFD
- ACACB
- IKBK
- NFKBIB
- CPT1A
- ACSL6
- PRKAB2
- JAK2
- PCK2
- ADIPOR1
- STK11
- PRKAG1
- TNFRSF1B
- ADIPOR
- RXR
- CD36
- ACSL5
- ACSL1
- LEP

**Sample List (X-axis):**

- TGGA\_NG\_AIR0\_01
- TGGA\_NG\_AIR0\_02
- TGGA\_NG\_AIR0\_03
- TGGA\_NG\_AIR0\_04
- TGGA\_NG\_AIR0\_05
- TGGA\_NG\_AIR0\_06
- TGGA\_NG\_AIR0\_07
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- TGGA\_NG\_AIR0\_09
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