

Figure 1: A plot showing the distribution of the number of genes in the clus4 cluster. The x-axis is 'Gene List Index' (0 to 17728) and the y-axis is 'Number of genes' (-1.0 to 0.5). A red line shows the cumulative distribution, peaking at 3420 and crossing zero at 10017. A green line marks the zero crossing. A black line shows the density of genes, with a peak at 3420. A shaded green area represents the distribution of genes in the clus4 cluster, labeled 'clus4' and 'NON.clus4'.

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 0.0 to 3.0. A red curve represents the 'Gene Set Null Density', which is bimodal with peaks at approximately -0.25 and 0.25. A black vertical line at ES = 0.528 represents the 'Observed Gene Set ES value'. The area to the left of this line is labeled 'Neg. ES "NON.clus4"' and the area to the right is labeled 'Pos. ES: "clus4"'. Below the x-axis, the following statistics are provided: ES = 0.528, NES = 1.68, Nom. p-val = 0.00415, FWER = 0.804, and FDR = 0.0706.

Heatmap visualization showing gene expression profiles across two clusters: **clus4** and **NON.clus4**. The y-axis lists 100 genes, and the x-axis represents individual samples. A color scale at the bottom indicates expression levels from -2 (blue) to 2 (red).

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

- Class
- TBX22
- ARHGEF4
- AR
- ARHGEF17
- OB
- FGD3
- GNB4
- GNG17
- ARHGEF16
- VAV1
- VAV3
- RAC2
- GNG2
- ARHGEF3
- TIAM2
- FGD2
- PREX1
- GNE3
- ARHGEF6
- GNO11
- ADRA1B
- ARHGAP4
- RASGRF2
- ADRA1D
- TIAM1
- FGD4
- TAB1
- PLEKHA2
- MCF2
- PIK3R3
- GNG12
- AKAP1
- RHOC
- ARHGEF2
- TRIO
- ARHGEF12
- GNE6
- KALRN
- GNA12
- GNG7
- RHOA
- RAC1
- SOS2
- GNG5
- RASGEF1
- ROCK1
- CDC42
- GNB2
- RHOB
- GNB1
- PIK3CA
- ITSN1
- ARHGEF18
- ADRA1A
- ARHGEF1
- GNA13
- RHOA
- ARHGEF9
- SOS1
- ARHGEF11
- PIK3R2
- PLN
- GNG10
- ROCK2
- PIK3R1
- NG2
- EC12
- GNG3
- NET1
- GNG4
- GNGT1