

Figure 1 displays a multi-panel plot illustrating the distribution of gene lists. The x-axis represents the Gene List Index, ranging from 0 to 15,000. The y-axis represents the number of genes in the set.

The top panel shows a red line graph representing the number of genes in the set. The line starts at 0, rises to a peak at index 5246, and then decreases, crossing the zero line at index 10017. A horizontal dashed line is drawn at the peak level.

The middle panel shows a barcode-like representation of the gene lists, with vertical lines indicating the presence of genes. The lines are labeled "Peak at 5246" and "Zero crossing at 10017".

The bottom panel shows a green area graph representing the distribution of gene lists. The area is labeled "clus4" on the left and "NON.clus4" on the right, indicating the distribution of gene lists across the index.

Number of genes: 17728 (in list), 87 (in gene set)

Gene Set Null Density

Observed Gene Set ES value

$P(ES)$

Neg. ES "NON.clus4"

Pos. ES: "clus4"

ES

ES = 0.468 NES = 1.72 Nom. p-val = 0.0021 FWER = 0.718 FDR = 0.0745

The figure displays a heatmap of gene expression data. The y-axis lists 100 genes, and the x-axis represents 100 individual samples. The samples are grouped into two clusters: 'clus4' (samples 1-50) and 'NON.clus4' (samples 51-100). A color scale at the top indicates expression levels, ranging from -2 (blue) to 2 (red), with 0 being white. The heatmap shows distinct expression patterns for many genes across the two clusters, with some genes showing high expression in 'clus4' and others in 'NON.clus4'. The genes listed on the y-axis are: Clus4, MAPK10, AKT1, TOPA, NR63, PIK3R2, PRKCB, ERBB4, NR6G, PRKCB, PIK3R2, NCK2, HBEGF, EGF, CAMK2B, NR61, ERBB, MYC, PAK3, CAMK1A, CBL, NR63, PAK9, CDKN1A, PLCG2, PIK3R2, EGFR, CBL, ERBB2, STAT3A, SHC3, SHC, EGFR, CRK, MAPK3, SHC2, ABL1, CBL, MAPK1, NCK1, NCK1, ABL2, MAPK3, SHC4, JAK1, PAK1, CAMK2A, KRAS, AKT1, RAF, JUN, PAK2, PTK2, PIK3CA, ARAF, MAPK9, PIK3CB, MAPK9, CAMK2G, MAP2K2, HRAS, GSK3B, MAPK1, EFEBF, PLCG1, SOS, ELK4, EGF, CDKN1B, NR61, PIK3R2, PIK3R2, ERBB2, PIK3CA, MTOR, STOR, HRAS, MAPK1, CRKL, PIK3R1, RAF, RPS6KA1, BRAF, ERBB3, and PRKCA.