

Figure 1: A plot showing the relationship between the Gene List Index (x-axis, 0 to 18113) and the number of genes in the set (y-axis, 0 to 18113). The plot is divided into two regions: "clus2" (left, green background) and "NON.clus2" (right, white background). A blue line represents the number of genes in the set, which decreases from 18113 at index 0 to a minimum of 63 at index 12687, and then increases back to 18113 at index 18113. A green vertical dashed line marks the "Zero crossing at 7260", and a blue vertical dashed line marks the "Peak at 12687". A horizontal dashed line is at y=18113. The plot also shows a green shaded area representing the distribution of the number of genes in the set, which is highest at the extremes and lowest in the middle.

Gene Set Null Density

Observed Gene Set ES value

$P(ES)$

Neg. ES "NON.clus2"

Pos. ES: "clus2"

ES

ES = -0.498 NES = -1.43 Nom. p-val= 0.0491 FWER= 0.938 FDR= 0.18

Heatmap visualization showing the expression of 50 genes across 40 TCGA samples, grouped into two clusters: **clus2** and **NON.clus2**. The color scale ranges from -2 (blue) to 2 (red).

Genes (Rows):

- Class
- GRM5
- PRKG2
- GRAF
- GUCY1B3
- PLA2G6
- PPP2CB
- GUCY1A3
- PLA2G3
- PPP2R1A
- HRAS
- GNAI3
- NRAS
- CRM1
- NOS1
- ARAF
- PLCB3
- GRIA2
- JMJD7-PLA2G4B
- PLA2G12A
- MAP2K2
- RAF1
- PPP2CA
- PLA2G10
- MAPK3
- PRKCA
- GNAI3
- PLCB1
- PLA2G1B
- GNA2
- MARK1
- PRKG1
- IGF1R
- KRAS
- GNAQ
- ITPR1
- MAP2K1
- GNAS
- GNAI1
- PLA2G4E
- GNA2
- ITPR3
- RYR1
- LYN
- PPP2R1B
- PRKCG
- PLCB4
- ITPR2
- CACNA1A
- PLA2G5
- GUCY1A2
- GNAO1
- GRIA3
- GRIA1
- PLA2G12B
- GNAI1
- PLA2G2A
- PLCB2
- PLA2G2F
- PLA2G4A
- PRKCB
- PLA2G2D
- IGF1

Samples (Columns):

- TCGA_4G_AA20_01
- TCGA_4G_AA21_01
- TCGA_W5_AA21_01
- TCGA_W5_AA2Q_01
- TCGA_W5_AA2T_01
- TCGA_W5_AA2W_01
- TCGA_W5_AA2Z_01
- TCGA_W5_AA34_01
- TCGA_W5_AA36_01
- TCGA_W5_AA38_01
- TCGA_ZD_A813_01
- TCGA_ZH_A811_01
- TCGA_ZH_A812_01
- TCGA_ZH_A815_01
- TCGA_ZH_A816_01
- TCGA_3X_AA19_01
- TCGA_3X_AA1A_01
- TCGA_3X_AA1B_01
- TCGA_3X_AA1C_01
- TCGA_3X_AA1E_01
- TCGA_W5_AA2G_01
- TCGA_W5_AA2H_01
- TCGA_W5_AA2O_01
- TCGA_W5_AA2R_01
- TCGA_W5_AA2U_01
- TCGA_W5_AA2X_01
- TCGA_W5_AA30_01
- TCGA_W5_AA31_01
- TCGA_W5_AA33_01
- TCGA_W5_AA39_01
- TCGA_W6_AA05_01
- TCGA_WD_A7RX_01
- TCGA_YR_A95A_01
- TCGA_ZH_A814_01
- TCGA_ZH_A818_01
- TCGA_ZU_A854_01