

Figure 1 consists of three vertically stacked panels sharing a common x-axis labeled "Gene List Index" ranging from 0 to 15,000. The top panel shows a red line representing the number of genes in the cluster, which peaks at 2521 and crosses zero at 8609. The middle panel shows a barcode of vertical lines representing individual genes. The bottom panel shows a green area plot representing the distribution of genes in the cluster, with labels "clus3" and "NON.clus3".

Gene Set Null Density

Observed Gene Set ES value

P(ES)

Neg. ES "NON.clus3"

Pos. ES: "clus3"

ES

ES = 0.571 NES = 1.75 Nom. p-val= 0 FWER= 0.368 FDR= 0.0963

Heatmap visualization showing gene expression profiles across 100 samples, categorized into two groups: **clus3** (left, red background) and **NON.clus3** (right, blue background). The y-axis lists 100 genes, grouped into 10 clusters (A-J). The color scale ranges from -2 (blue) to 2 (red), with 0 being white. The heatmap shows distinct expression patterns for each cluster across the samples.

**Gene List (A-J):**

- A:** CLU, PRKCE, DRD1, HTZ2, HTZ2C, TUBA8, GIM1, GIM2, GIM3, PRKCE, ADCY1, ADRE1, TUBA4, TPR1, TUBA3, PRKGE, GUCY1B3, ADCY5, GUCY1A3, PLCB4, PLCB3, TUBB4, TUBA5, TUBB4G, PRKQ1, GNAH1, PRKZC1, GUCY1A2, ADCY7, TUBB8, PRKACB, PRKACA, PRKACA, MAP2K3, GNAI1, GRAS, PGCFR4, TUBB2A, GNA11, ADCY8, SIC, FPR, NRAS, SOS2, ADCY9, TUBB3, TPR2, MAP2K2, TPR3, TUBB1, PRKX, PRKACA, GRAS, GRB2, ADCY9, CSNK1D, MAP2K1, GJA1, ADCY4, TUBB2C, TUBB2B, TUBB1, PLCB1, TUBB1, ADCY7, MAP2K3, PGCFR8, GNAI2, DRD2, TUBA1, LPAR1, PGCFR, MAPK7, TUBB, EGFR, TUBA1A, TUBA1B, PGCFD, H1, NRAS, PGCFB, GNAI2, PLCB2, EGR, CDK1, TUBA1, TUBB1.