

Figure 1: A plot showing the distribution of the number of genes in the "clus3" cluster across the gene list index. The x-axis is "Gene List Index" (0 to 22849) and the y-axis is "Number of genes" (0 to 22849). A red line shows the cumulative distribution, peaking at index 2822 and crossing zero at index 6665. A green line marks the zero crossing. A shaded green area represents the distribution of genes in the "clus3" cluster, which is concentrated at the beginning of the gene list. A dashed horizontal line is at y=85. Text labels indicate "Peak at 2822", "Zero crossing at 6665", and "Number of genes: 22849 (in list), 85 (in gene set)".

A density plot showing the probability 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 vertical black line represents the 'Observed Gene Set ES value' at ES = 0.293. The area under the red curve to the left of the black line is shaded light blue. Text labels on the x-axis indicate 'Neg. ES "NON.clus3"' for negative values and 'Pos. ES: "clus3"' for positive values. At the bottom, a summary line provides the following statistics: ES = 0.293, NES = 0.98, Nom. p-val = 0.477, FWER = 0.998, and FDR = 1.

Heatmap visualization showing gene expression patterns across two clusters: **clus3** (red background) and **NON.clus3** (blue background). The y-axis lists 100 genes, and the x-axis represents individual samples. The heatmap is divided into two vertical sections: a red section for **clus3** and a blue section for **NON.clus3**. Each gene's expression is represented by a row of colored squares (red for high, blue for low) across the samples. The genes listed on the y-axis are: C10orf4, FOXP1, WNT7A, WNT7B, PITX2, WNT3A, WNT2B, WNT6, WNT10A, WNT1, CTNNGBP1, FOSL1, KREMEN1, DAB1, SLC3A3R1, WNT3A, SFRP1, FZD6, PORCN, DKK1, CSNK1A1, MYC, GAPDH, BTIC, TCF7L1, CD41, DNLI, RP-13A, JUN, DLX5, ALX3, CSNK1G1, FBXW7, FZD1, WNT3, FGF11, PPP2R1A, ZFP, SENP2, SNR3B, GSK3A, GPR90, LEF1, CXCR2, AXIN1, AXL, CSNK1D, CSNK1A, WNT6, WNT1, WNT16, FBXW5, B2M, CTNNG1, CTBP1, CXCR3, FRAT1, WNT3B, FGF4, CTBP2, TLE1, Y, NLK, BCL9, WNT11, FZD8, LRP6, LRP5, NKD1, TLE2, FZD6, WSP1, FZD8, PYGO1, SOST, FZD5, SFRP4, FZD4, DKK1, TCF7, FZD2, WNT1, CXCR4, FRZD, RHOA, and WNT2.