

Figure 1 is a plot showing the number of genes in a cluster (blue line) and the number of genes in a set (green area) as a function of the Gene List Index. The blue line starts at 17346, decreases to a minimum of 86 at index 12823, and then increases. The green area shows the number of genes in a set, which is 17346 at index 0 and decreases to 86 at index 12823. Vertical dashed lines mark the zero crossing at 9190 and the peak at 12823.

The figure is a density plot showing the distribution of ES values. The x-axis is labeled 'ES' and ranges from -1.0 to 1.0. The y-axis is labeled 'P(ES)' and ranges from 0.0 to 1.5. A red curve represents the 'Gene Set Null Density', which is bimodal with peaks around -0.2 and 0.3. A vertical black line represents the 'Observed Gene Set ES value' at approximately -0.657. The area under the red curve to the left of this line is shaded in light blue. Text labels at the bottom indicate 'Neg. ES "NON.clus4"' for the shaded area and 'Pos. ES: "clus4"' for the unshaded area to the right. At the very bottom, summary statistics are provided: ES = -0.657, NES = -1.65, Nom. p-val= 0.08, FWER= 0.771, and FDR= 0.25.

Heatmap visualization showing the expression of 100 ribosomal protein genes across 100 conditions. The genes are grouped into two clusters: **clus4** (red) and **NON.clus4** (blue). The conditions are grouped into two clusters: **clus1** (red) and **clus2** (blue). The heatmap shows that genes in **clus4** are highly expressed in **clus1** conditions and lowly expressed in **clus2** conditions, while genes in **NON.clus4** show the opposite pattern.

**Gene List (clus4):** MRPL13, RPL25L1, RPS27L, RPS27, RPS26, RPL9, RPL36A, RPL19, RPL27, RPL30, RPL11, RPS8, RPL26, RPL27, RPL23A, RPS11, RPL8, RPL37A, RPS21, KSL2, RPL37, RPL37A, RPL22, RPS12, RPS22, RPL6, RPL38, RPLP1E, RPL35, RPL21, RPS4AB, RPS27A, RPS26, RPS23, RPS9, RPL13A, RPS15, RPS15, RPL13, RPL19, RPL17, RPS1A, RPS3, RPL3A, RPS26, RPL19, RPS2, RPL3, RPS4K, RPS9, RPL12B, RPS1B, RPS10, RPS2, RPL14, RPL13A, RPL10A, RPL28, RPL19, RPS18, RPL32, RPSA, RPL35A, RPL25L1, RPS28, RPL36A, RPL3L, RPL2.

**Gene List (NON.clus4):** MRPL13, RPL25L1, RPS27L, RPS27, RPS26, RPL9, RPL36A, RPL19, RPL27, RPL30, RPL11, RPS8, RPL26, RPL27, RPL23A, RPS11, RPL8, RPL37A, RPS21, KSL2, RPL37, RPL37A, RPL22, RPS12, RPS22, RPL6, RPL38, RPLP1E, RPL35, RPL21, RPS4AB, RPS27A, RPS26, RPS23, RPS9, RPL13A, RPS15, RPS15, RPL13, RPL19, RPL17, RPS1A, RPS3, RPL3A, RPS26, RPL19, RPS2, RPL3, RPS4K, RPS9, RPL12B, RPS1B, RPS10, RPS2, RPL14, RPL13A, RPL10A, RPL28, RPL19, RPS18, RPL32, RPSA, RPL35A, RPL25L1, RPS28, RPL36A, RPL3L, RPL2.