

Figure 1 displays the expression profile of the 'cluser1' gene set across 18,187 genes. The top panel shows the log2(RPKM) expression (y-axis) versus the Gene List Index (x-axis, 0 to 18,187). A blue line represents the expression profile, which shows a general downward trend followed by a sharp increase. A green vertical dashed line marks the 'Zero crossing at 7681', and a blue vertical dashed line marks the 'Peak at 14078'. A horizontal dashed line is drawn at approximately 1.5. The middle panel is a barcode plot showing the number of genes (y-axis) versus the Gene List Index (x-axis, 0 to 18,187). The barcode shows a high density of genes with low expression, which decreases as the expression level increases. The bottom panel is a density plot showing the number of genes (y-axis) versus the Gene List Index (x-axis, 0 to 18,187). The density is high for low expression values and decreases as the expression level increases. The area under the curve is shaded green, labeled 'cluser1', and the area above the curve is white, labeled 'NON.cluser1'.

The figure is a density plot showing the distribution of ES values. The x-axis is labeled 'ES' and ranges from -0.5 to 0.6. The y-axis is labeled 'P(ES)' and ranges from 0 to 4. 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 at ES = -0.371 represents the 'Observed Gene Set ES value'. The area under the red curve to the left of this line is shaded in light blue. Text labels on the x-axis indicate 'Neg. ES "NON.clus1"' for the left side and 'Pos. ES: "clus1"' for the right side. Below the x-axis, summary statistics are provided: ES = -0.371, NES = -1.45, Nom. p-val = 0.0564, FWER = 0.942, and FDR = 0.714.

ES = -0.371 NES = -1.45 Nom. p-val = 0.0564 FWER = 0.942 FDR = 0.714

The heatmap displays the expression levels of 100 genes across 100 samples. The genes are listed on the y-axis, and the samples are listed on the x-axis. The samples are grouped into two main clusters: clus1 (left) and NON.clus1 (right). The color scale ranges from -2 (blue) to 2 (red), with 0 being white. The heatmap shows a clear separation between the two clusters, with clus1 samples generally having higher expression levels for the genes in the top half of the list and lower expression levels for the genes in the bottom half. Conversely, NON.clus1 samples show the opposite pattern.

**Gene List (Y-axis):**

CH25  
TGFL2  
EGFR  
ENBR2  
NFKB1  
EGFR2  
CASP9  
SOS1  
CREB3L4  
NFKBIA  
PIK3R3  
MDM2  
CREB3  
MAP3G  
CDKN1B  
BAX  
PTEN  
PIK3CD  
TGF $\alpha$   
PIK3R2  
PIK3CB  
NOS3-1  
NRAS  
VOS3  
HSP90AA1  
CHUK  
RBI  
GSK3B  
PIK3CA  
ESF  
HSP90B1  
ARAF  
GRB2  
NLA  
RAF1  
PIK3S  
SRD5A2  
CREB1  
GSTP1  
AKT2  
MTOR  
FGFR1  
NRAS  
IKK $\beta$   
MAP2K2  
MAPK1  
EP300  
CREBBP  
CREB1.2  
IRAF  
PIK3CG  
POGPA  
PDGFR  
PIK3L  
CDK2  
ATF4  
KRAS  
AKT1  
TP53  
CND1  
IKK $\beta$   
TCF7  
AR  
CDKN1A  
CTNINB1  
MAP2K1  
E2F2  
PDGFC  
PDGFB  
IGF1  
PDGFRB  
E2F4  
CREB1.1  
BCL2  
BCL2L1  
AKT3  
TGFL1  
E2F1  
FOXO1  
MSR  
PDGFRB  
CND1  
CND2  
CREB1.1  
CREB3

**Sample List (X-axis):**

TCGA-06-0001  
TCGA-06-0002  
TCGA-06-0003  
TCGA-06-0004  
TCGA-06-0005  
TCGA-06-0006  
TCGA-06-0007  
TCGA-06-0008  
TCGA-06-0009  
TCGA-06-0010  
TCGA-06-0011  
TCGA-06-0012  
TCGA-06-0013  
TCGA-06-0014  
TCGA-06-0015  
TCGA-06-0016  
TCGA-06-0017  
TCGA-06-0018  
TCGA-06-0019  
TCGA-06-0020  
TCGA-06-0021  
TCGA-06-0022  
TCGA-06-0023  
TCGA-06-0024  
TCGA-06-0025  
TCGA-06-0026  
TCGA-06-0027  
TCGA-06-0028  
TCGA-06-0029  
TCGA-06-0030  
TCGA-06-0031  
TCGA-06-0032  
TCGA-06-0033  
TCGA-06-0034  
TCGA-06-0035  
TCGA-06-0036  
TCGA-06-0037  
TCGA-06-0038  
TCGA-06-0039  
TCGA-06-0040  
TCGA-06-0041  
TCGA-06-0042  
TCGA-06-0043  
TCGA-06-0044  
TCGA-06-0045  
TCGA-06-0046  
TCGA-06-0047  
TCGA-06-0048  
TCGA-06-0049  
TCGA-06-0050  
TCGA-06-0051  
TCGA-06-0052  
TCGA-06-0053  
TCGA-06-0054  
TCGA-06-0055  
TCGA-06-0056  
TCGA-06-0057  
TCGA-06-0058  
TCGA-06-0059  
TCGA-06-0060  
TCGA-06-0061  
TCGA-06-0062  
TCGA-06-0063  
TCGA-06-0064  
TCGA-06-0065  
TCGA-06-0066  
TCGA-06-0067  
TCGA-06-0068  
TCGA-06-0069  
TCGA-06-0070  
TCGA-06-0071  
TCGA-06-0072  
TCGA-06-0073  
TCGA-06-0074  
TCGA-06-0075  
TCGA-06-0076  
TCGA-06-0077  
TCGA-06-0078  
TCGA-06-0079  
TCGA-06-0080  
TCGA-06-0081  
TCGA-06-0082  
TCGA-06-0083  
TCGA-06-0084  
TCGA-06-0085  
TCGA-06-0086  
TCGA-06-0087  
TCGA-06-0088  
TCGA-06-0089  
TCGA-06-0090  
TCGA-06-0091  
TCGA-06-0092  
TCGA-06-0093  
TCGA-06-0094  
TCGA-06-0095  
TCGA-06-0096  
TCGA-06-0097  
TCGA-06-0098  
TCGA-06-0099  
TCGA-06-0100