

Figure 1 displays the distribution of genes in the *clus3* gene set. The plot shows the cumulative distribution function (CDF) of the Gene List Index, with a peak at 4543 and a zero crossing at 9958. The x-axis represents the Gene List Index (0 to 19,051), and the y-axis represents the Number of genes (19,051 in list, 84 in gene set). The plot is divided into two regions: "clus3" (left) and "NON.clus3" (right).

Gene Set Null Density

Observed Gene Set ES value

P(ES)

Neg. ES "NON.clus3"

Pos. ES: "clus3"

ES

ES = 0.578 NES = 1.57 Nom. p-val= 0.0124 FWER= 0.686 FDR= 1

Heatmap visualization showing gene expression patterns across two conditions: **clus3** and **NON.clus3**. The y-axis lists 100 genes, and the x-axis represents individual samples. The color scale ranges from blue (low expression) to red (high expression).

Genes listed on the y-axis (from top to bottom):

- CHST1
- BMP5
- PTX2
- TGF β 2
- BMP5
- GDF6
- ITGB1
- GDF7
- GDF5
- BMP4
- INHBA
- DCN
- ID3
- LTBP1
- INHBB
- ID3
- BMP7
- AMH
- BMP10
- THBS1
- THBS3
- CDKN2B
- THBS3
- INHBC
- ID1
- CHRD
- AMH2
- SMAD6
- SMAD1
- BMPR1B
- TGF β 1
- LEFTY2
- INHBE
- ACVR2A
- ACVR1
- THBS4
- THBS2
- SMAD9
- BMP6
- SMAD4
- SMAD7
- COMP
- ROCK2
- LEFTY1
- BMP2
- EP5
- MAP3K5
- ZFYVE16
- TGF β 1
- SMAD3
- TGF β 1
- MYC
- SMAD5
- RBL2
- BMP1A
- SMURF1
- CRABP1
- ACVR1C
- RHA
- ROCK1
- TGF β 1
- SMAD2
- RPS27C
- PPP2CB
- SMURF2
- SKP1
- SP1
- BMP8A
- BMP6B1
- PPP2R1A
- PPP2R1A
- EDY4
- ACVR1
- ID4
- RBL1
- EP300
- PPP2R1B
- MAPK1
- RBL1
- CUL1
- ACVR2B
- ZFYVE9
- NODAL
- TNF
- IFNG