

Gene Set Null Distribution

Y-axis: $P(ES)$

X-axis: ES

Legend:

- Gene Set Null Density (Red line)
- Observed Gene Set ES value (Black vertical line)

Labels on X-axis:

- Neg. ES "NON.clus4"
- Pos. ES: "clus4"

Observed values:

ES = -0.297 NES = -0.998 Nom. p-val= 0.472 FWER= 1 FDR= 1

clus4 **NON.clus4**

Heatmap visualization showing gene expression patterns across 100 samples, grouped into two clusters: **clus4** (left) and **NON.clus4** (right). The y-axis lists 100 genes, and the x-axis lists 100 samples. The heatmap shows a clear separation between the two clusters, with **clus4** samples (left) generally showing higher expression of genes like PDGFRA, FGF2, PIK3CD, PDGFA, HGF, PIK3R1, FGF22, PIK3R5, FGF5, RB1, PIK3CG, CDKN1A, FGF10, PDGFRB, NRAS, E2F3, PDGFR, PDGFRD, FGF20, FGF10, PTEN, PIK3CA, CDK6, TP53, FGF2, E2F2, MDM2, PIK3R2, PIK3CB, FGF11, FGF19, BRAF, PIK3R3, HRAS, KRAS, EGFR, FGF17, MAPK1, MAPK3, BAD, CDK4, PDGFC, MAP2K2, MAP2K1, CDKN1, ARAF, AKT2, RAS, AKT1, IGF1R, MITF, FGF12, FGF13, MET, AKT3, FGF8, EGF, CDKN2A, CDH1, FGF19, IGF1, FGF1, FGF7, and FGF14. The **NON.clus4** samples (right) show a different expression profile, with lower expression of many of these genes.