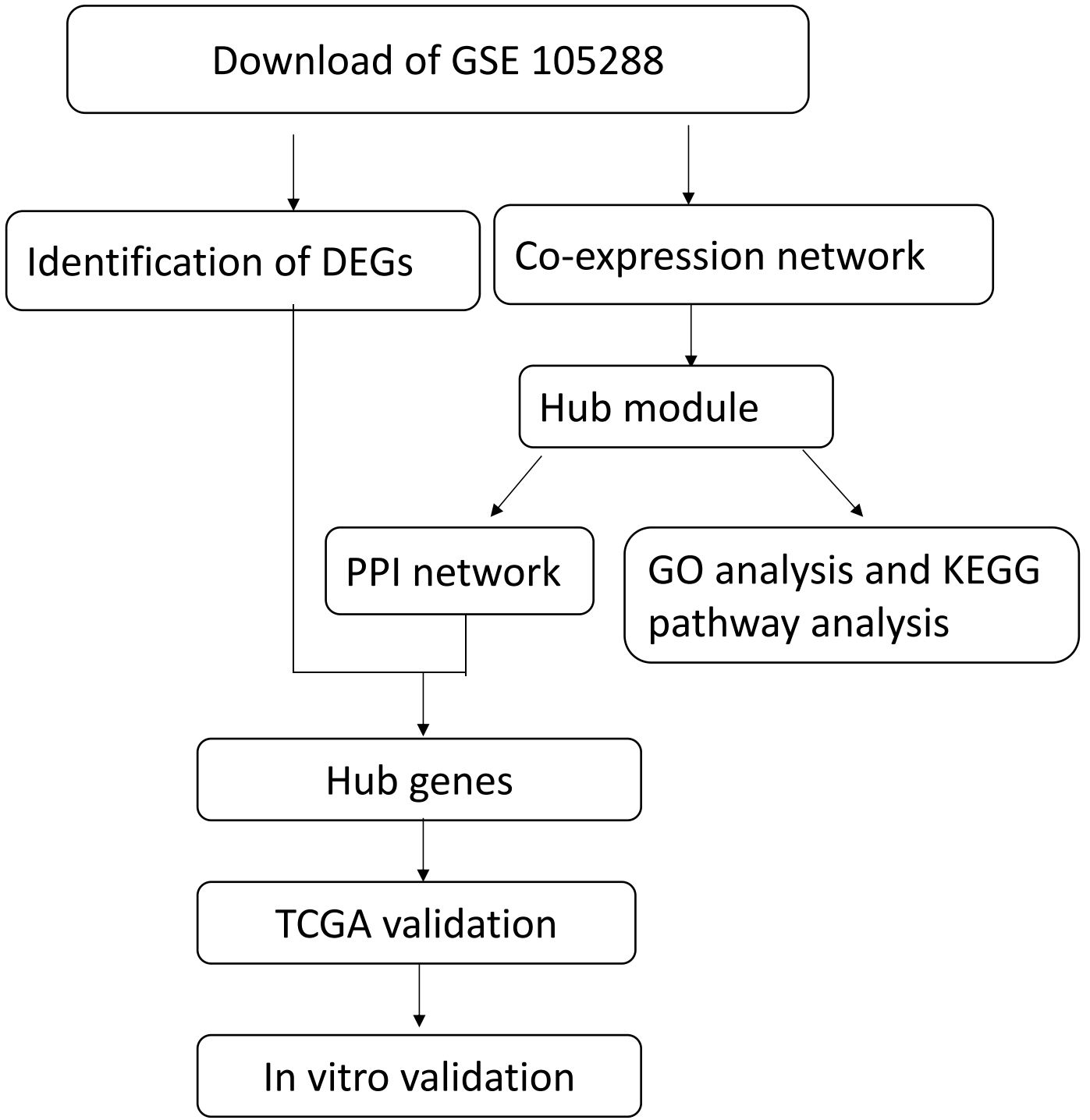


**Supplementary Figure S1** The flowchart of the integrated analysis and functional validation

**Supplementary Figure S2** Three samples were detected as outliers and removed from the subsequent analysis.

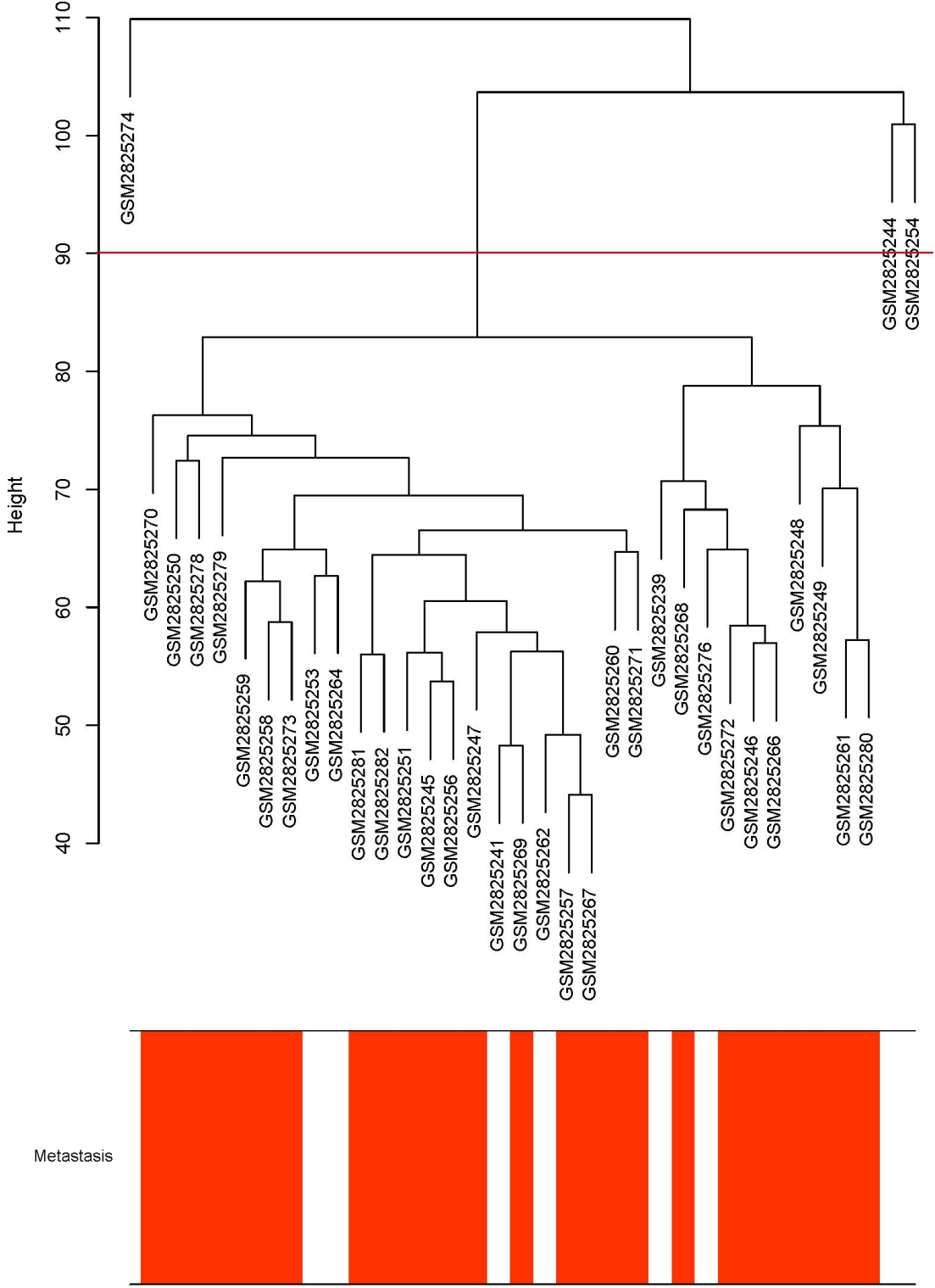
**Supplementary Figure S3** Functional and signaling pathway analysis of the DEGs. (A) cellular components, (B) Biological processes, (C) molecular function and (D) KEGG pathway

# Supplementary Figure S1



# Supplementary Figure S2

Sample dendrogram and trait heatmap



# Supplementary Figure S3

