

**Figure S1 (A-C)** Consensus clustering matrix based on 20 m<sup>6</sup>A genes for k=3-5. **(D-E)** The consensus distribution and Delta area for k=2-5. **(F)** The PCA of the m<sup>6</sup>A clusters.

**Figure S2 (A-C)** The previral genes between the m<sup>6</sup>A clusters

**Figure S3 (A-C)** The stimular genes **(A)**, inhibitor genes **(B)** and MHC genes **(C)** between the m<sup>6</sup>A clusters. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, \*\*\*\*p<0.0001.

**Figure S4 (A-C)** Consensus clustering matrix based on 6771 DEGs for k=2-5. **(D)** The consensus distribution area for k=2-5. **(E)** The PCA of the Gene clusters. **(F)** The 20 m<sup>6</sup>A genes between the Gene clusters. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001, \*\*\*\*p<0.0001.

**Figure S5 (A-B)** The HFD45 **(A)** and m6A score **(B)** between the Gene clusters. **(C-F)** The boxplot of m6A score in groups of different clinical characteristics including sex **(C)**, ICU **(D)**, mechanical ventilation **(E)** and diabetes **(F)**. **(G)** The correlation between m6A score and common pathways.

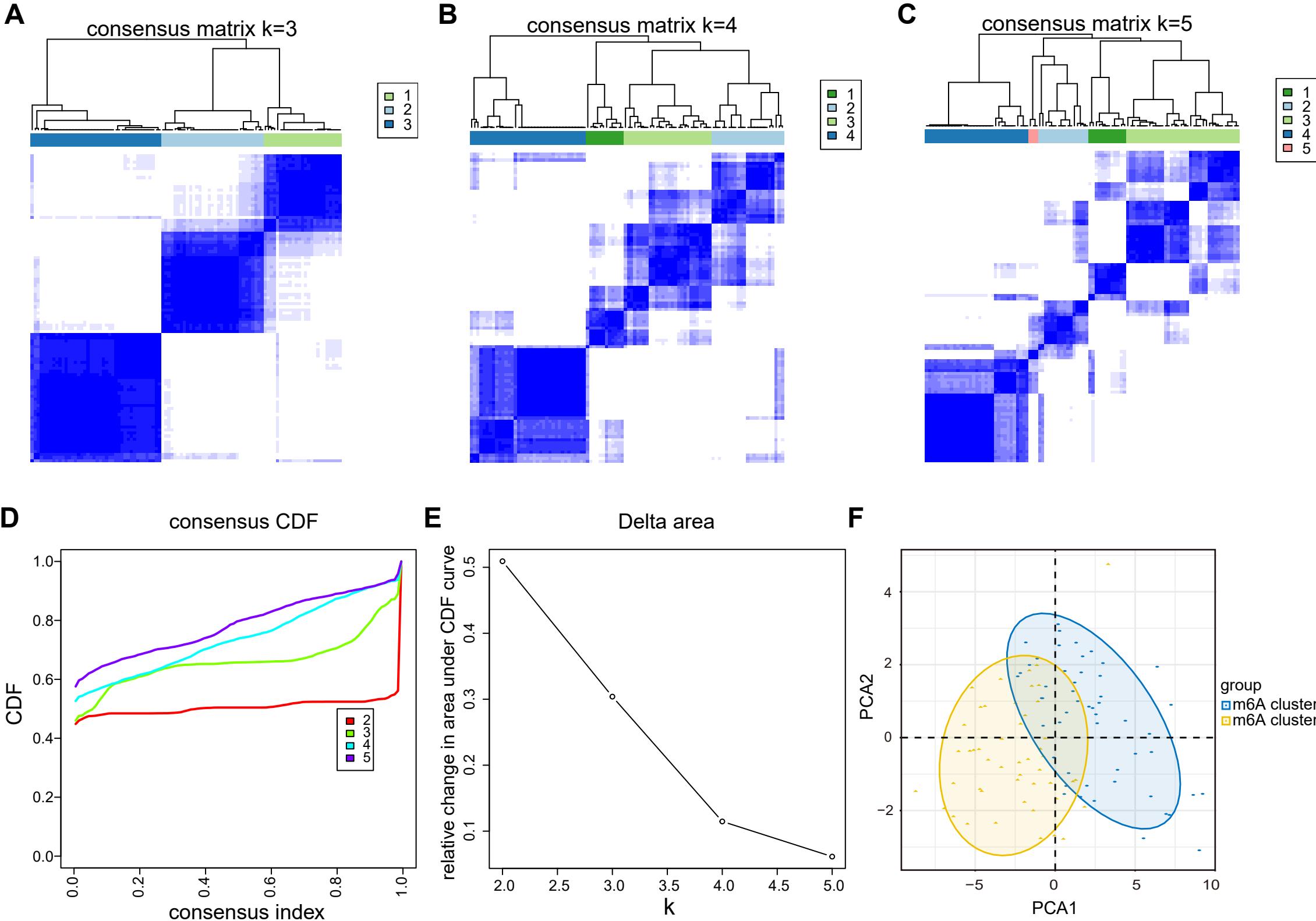


Figure S1

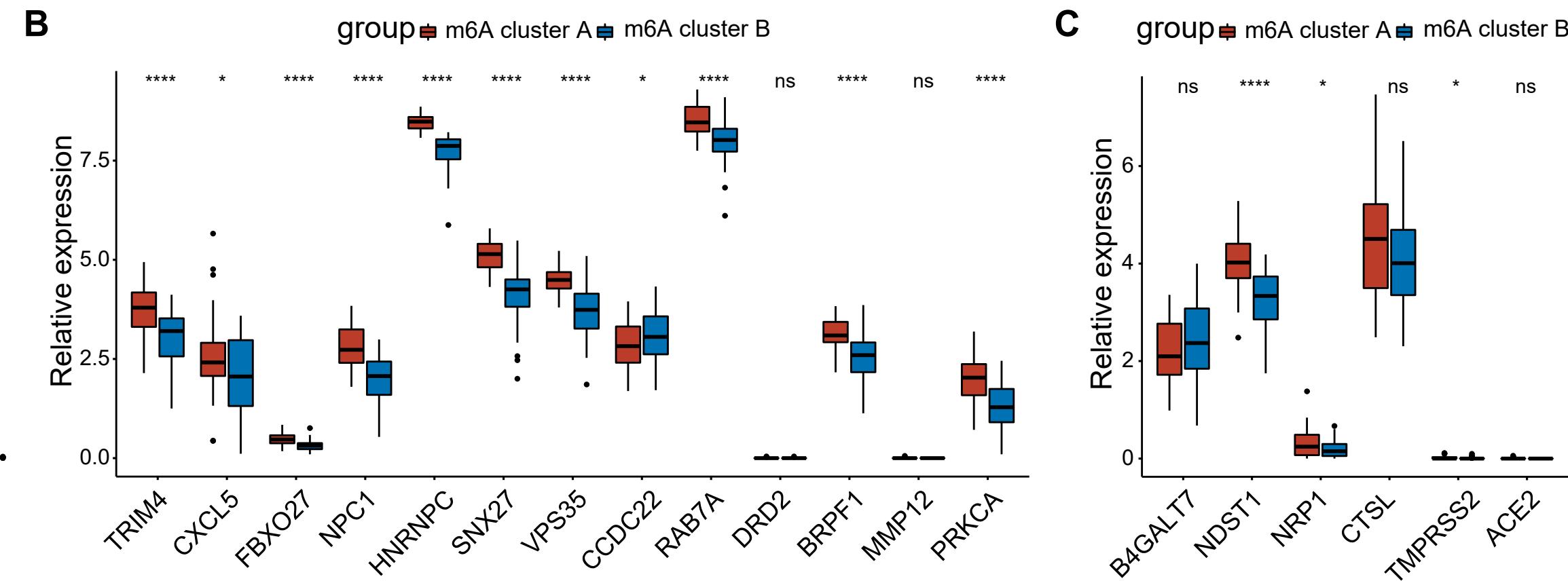
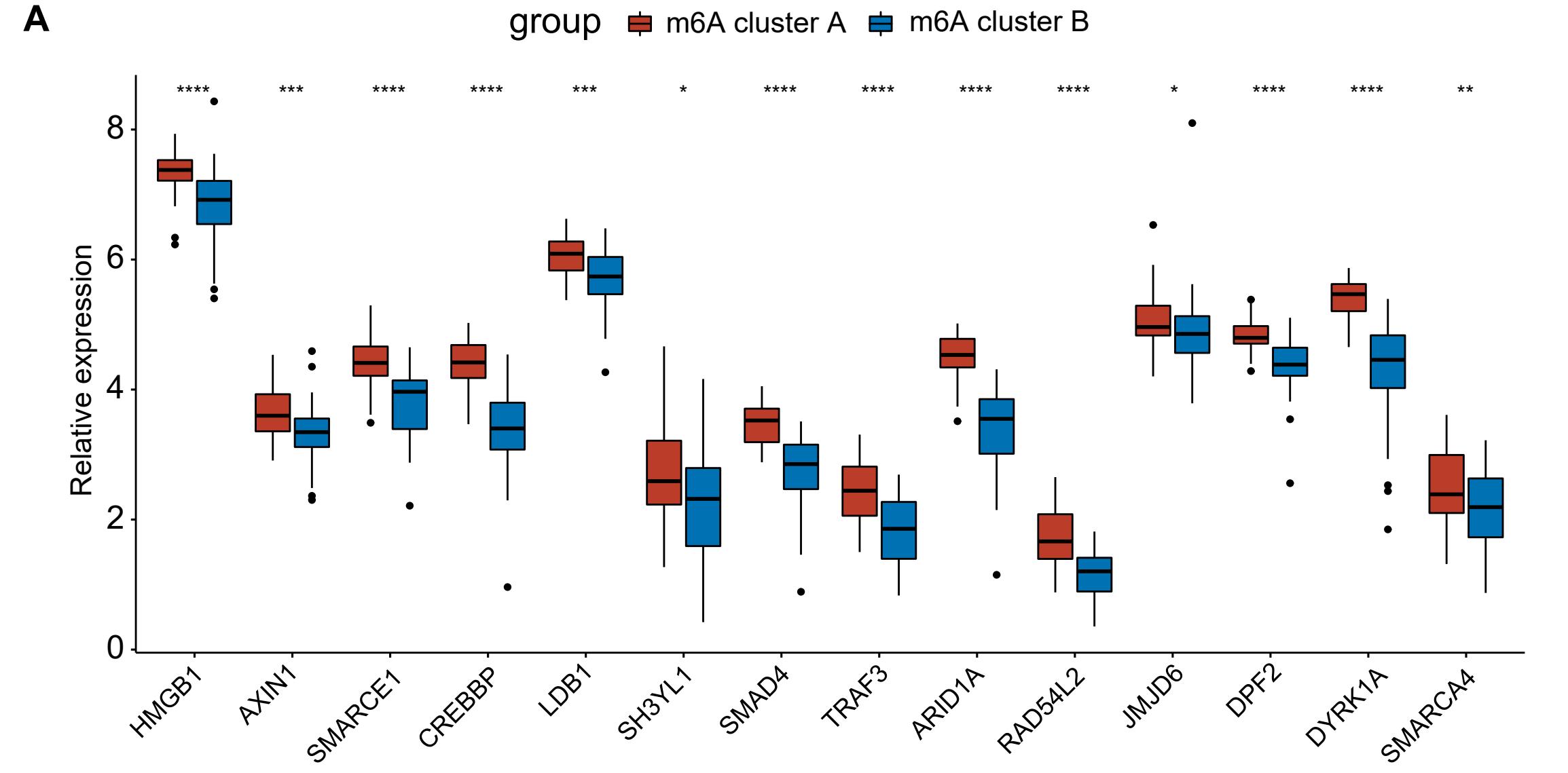


Figure S2

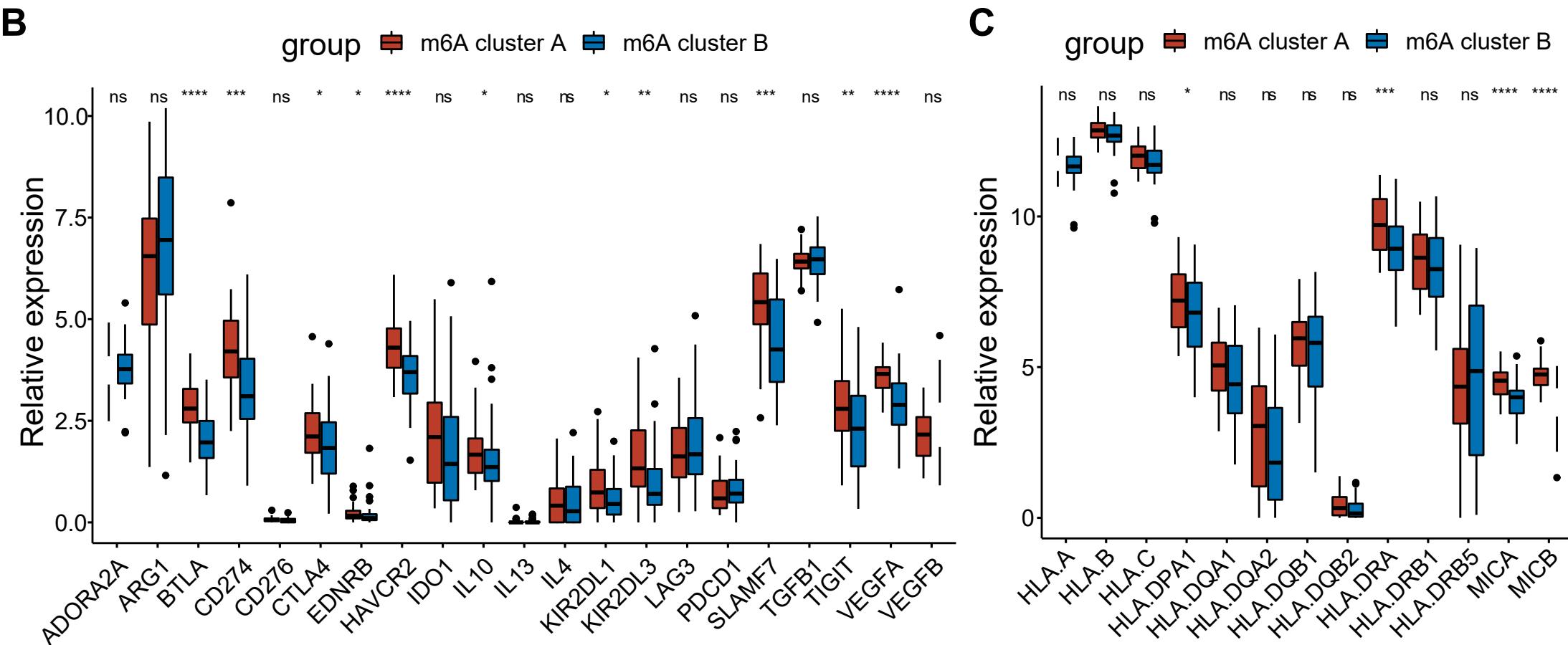
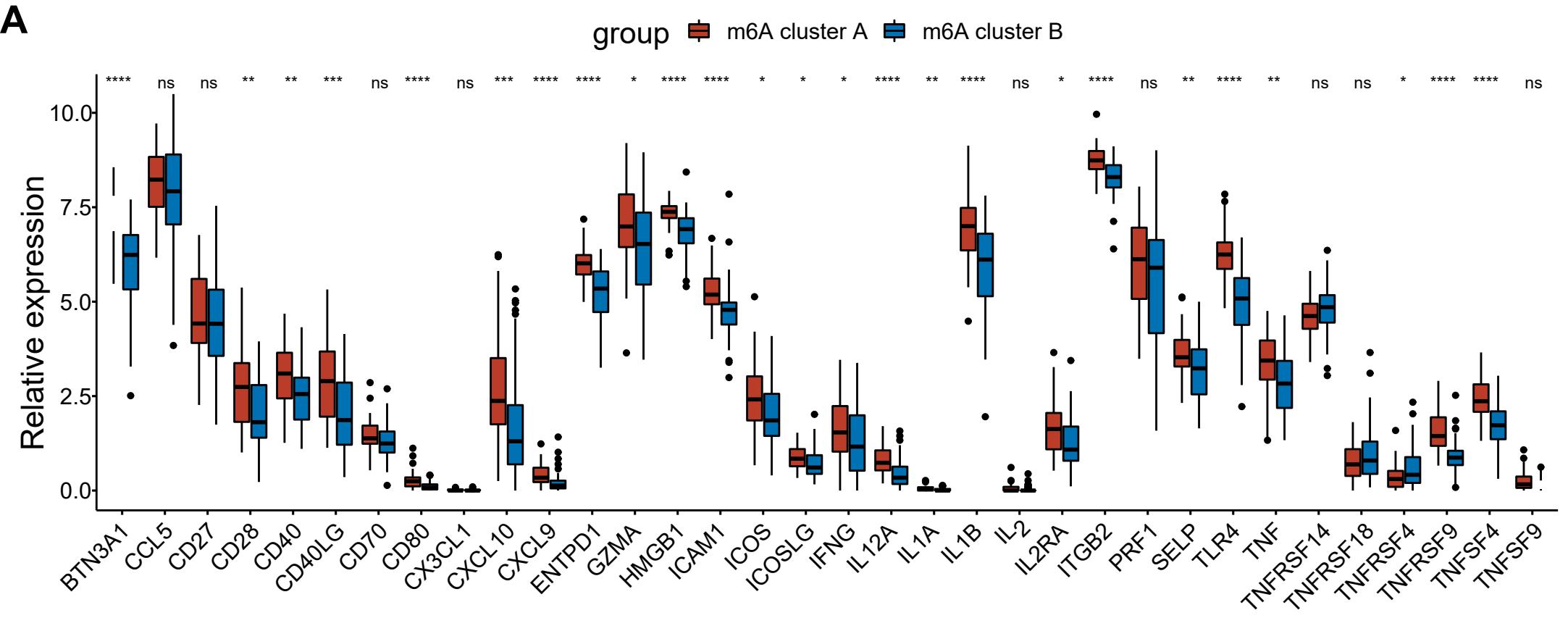


Figure S3

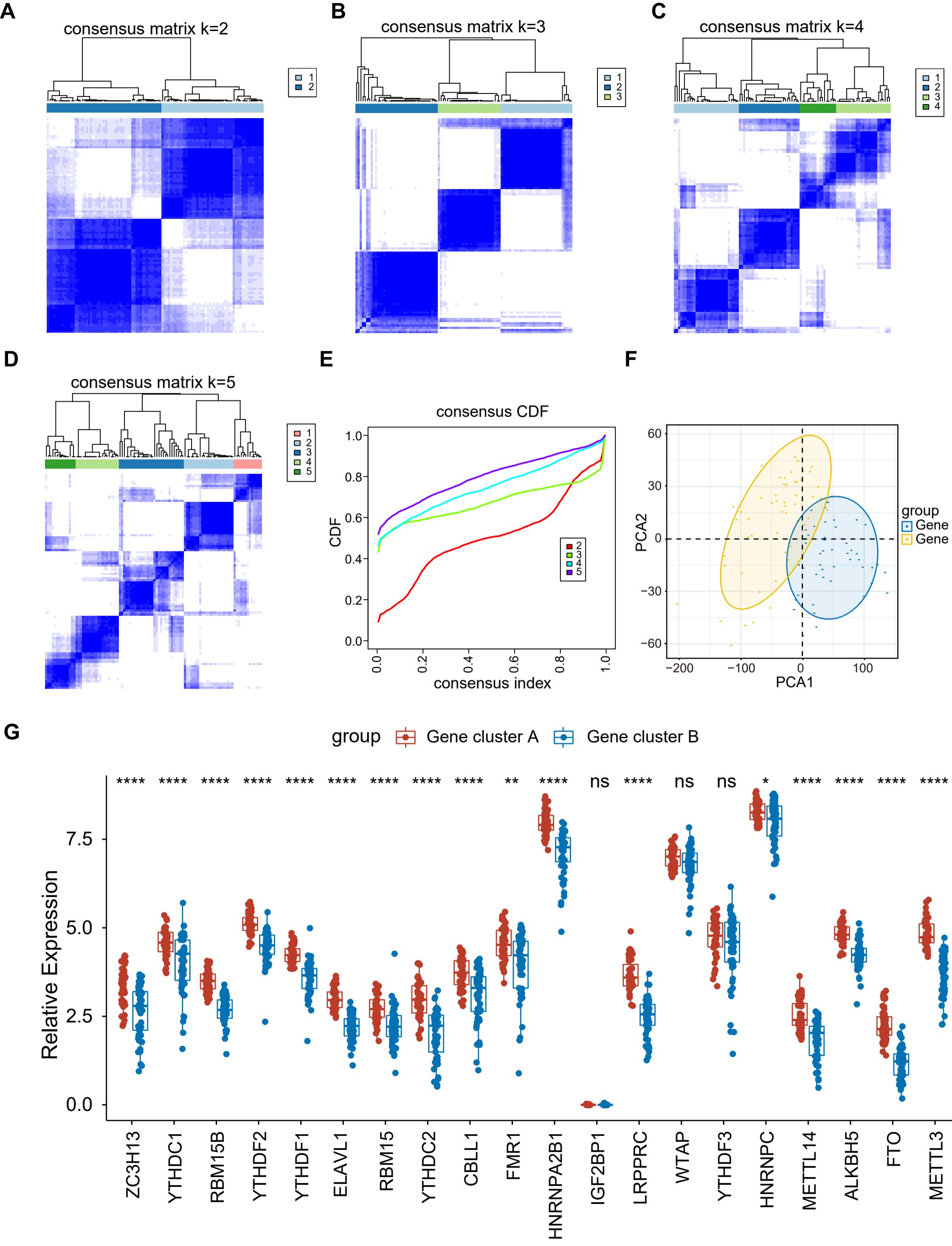


Figure S4

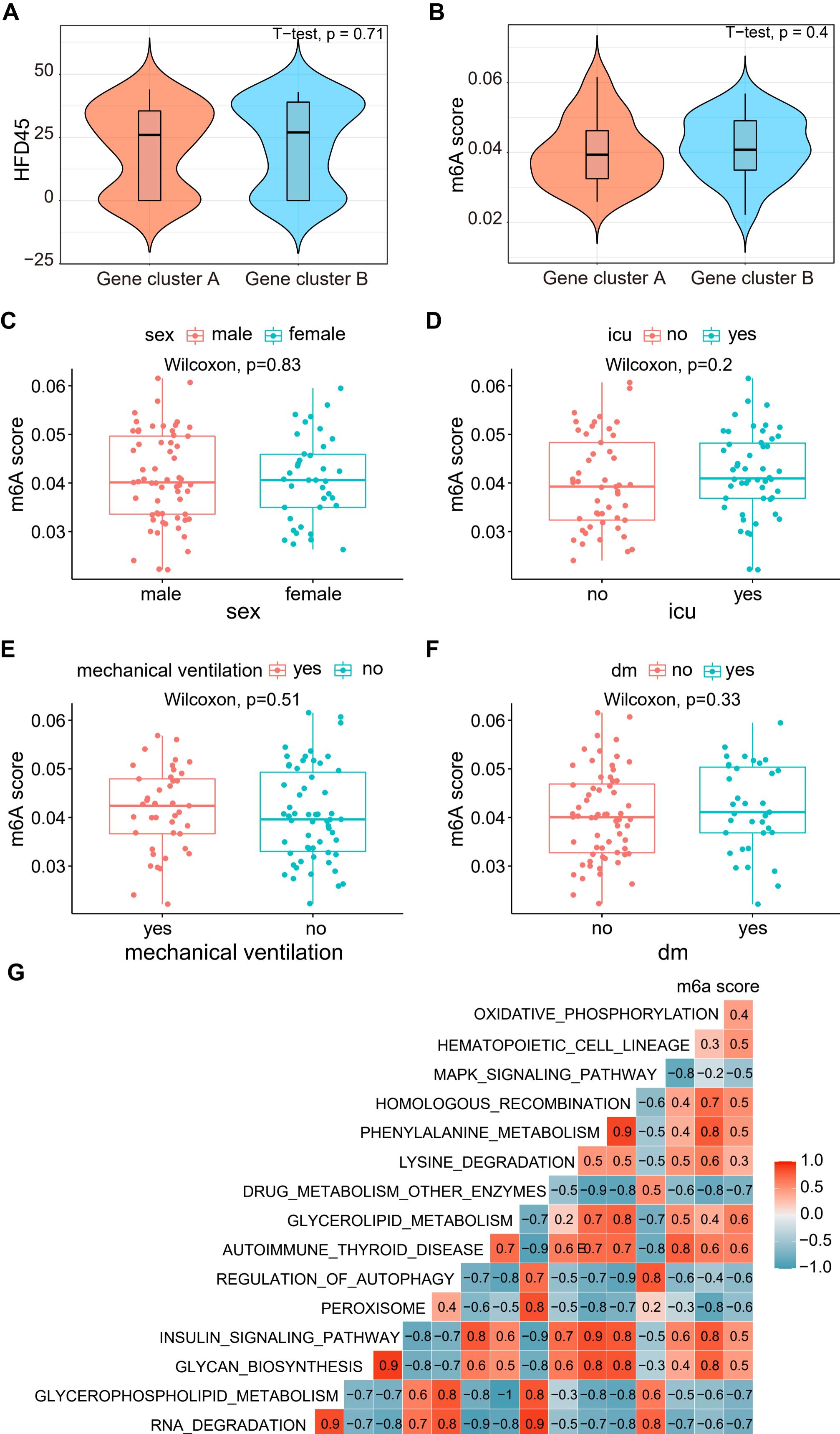


Figure S5