

Supplementary Figure 1|SA regulates the gene expression profiles of extracellular region on day 14

(A)Heatmap of differentially expressed genes in 0.5%SA group and control group.

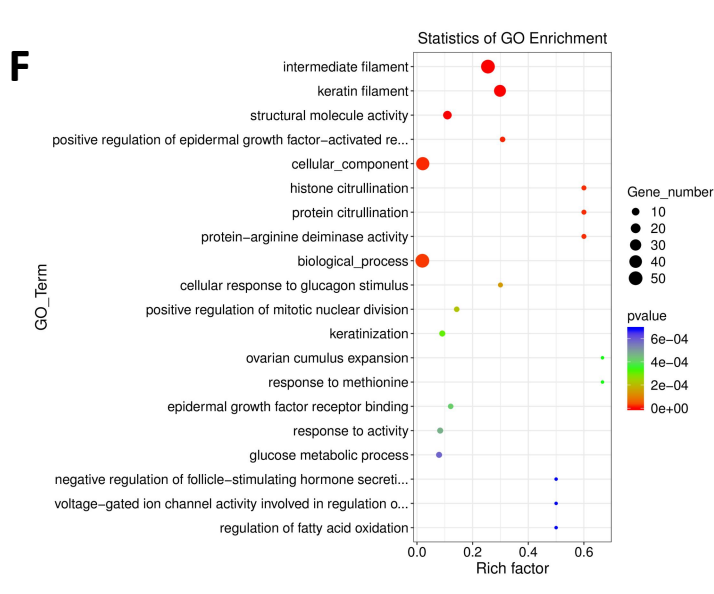
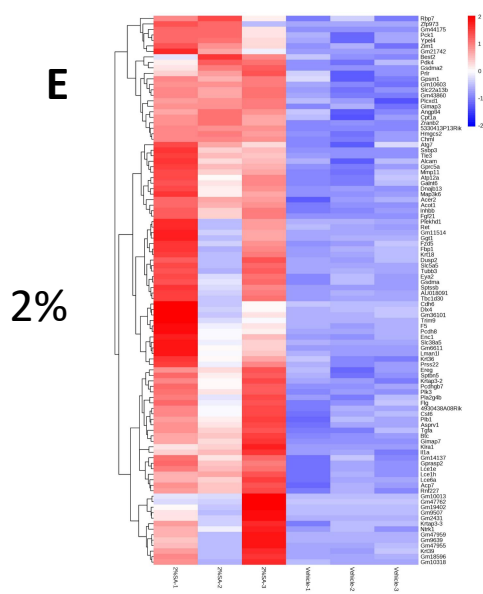
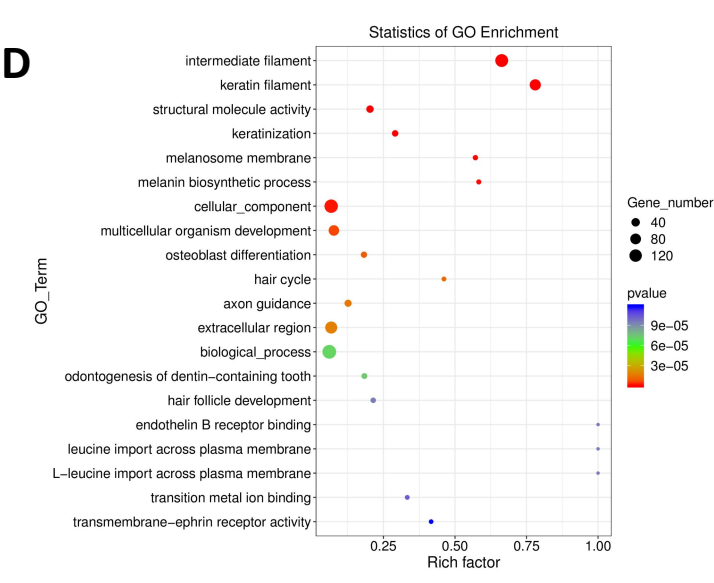
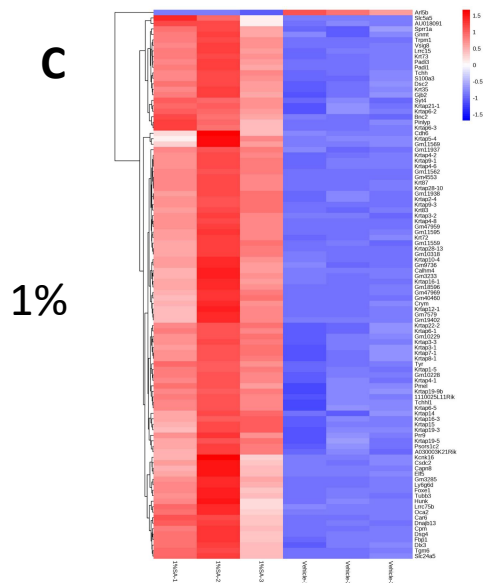
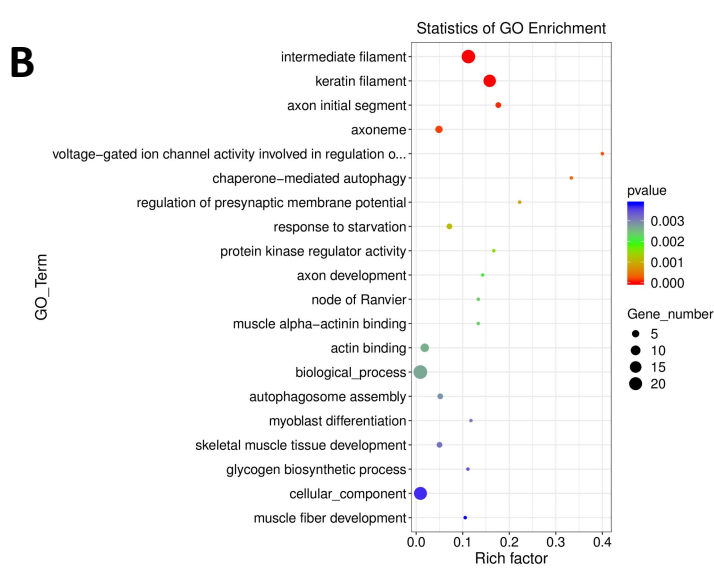
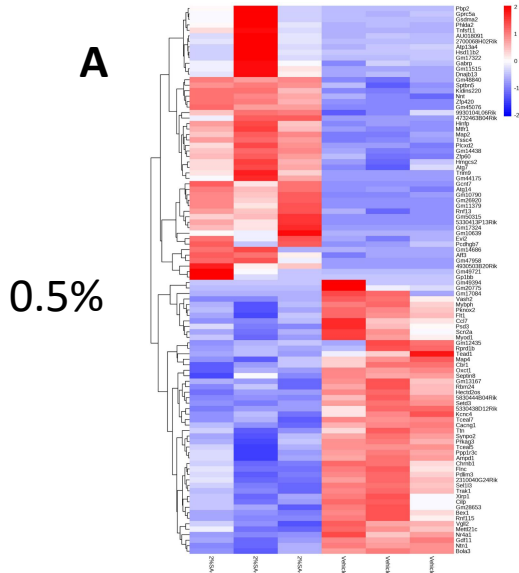
(B)Scatter plot for GO analysis based on RNAseq data from mice treated with 0.5%SA or gel vehicle for 14 days.

(C)Heatmap of differentially expressed genes in 1%SA group and control group.

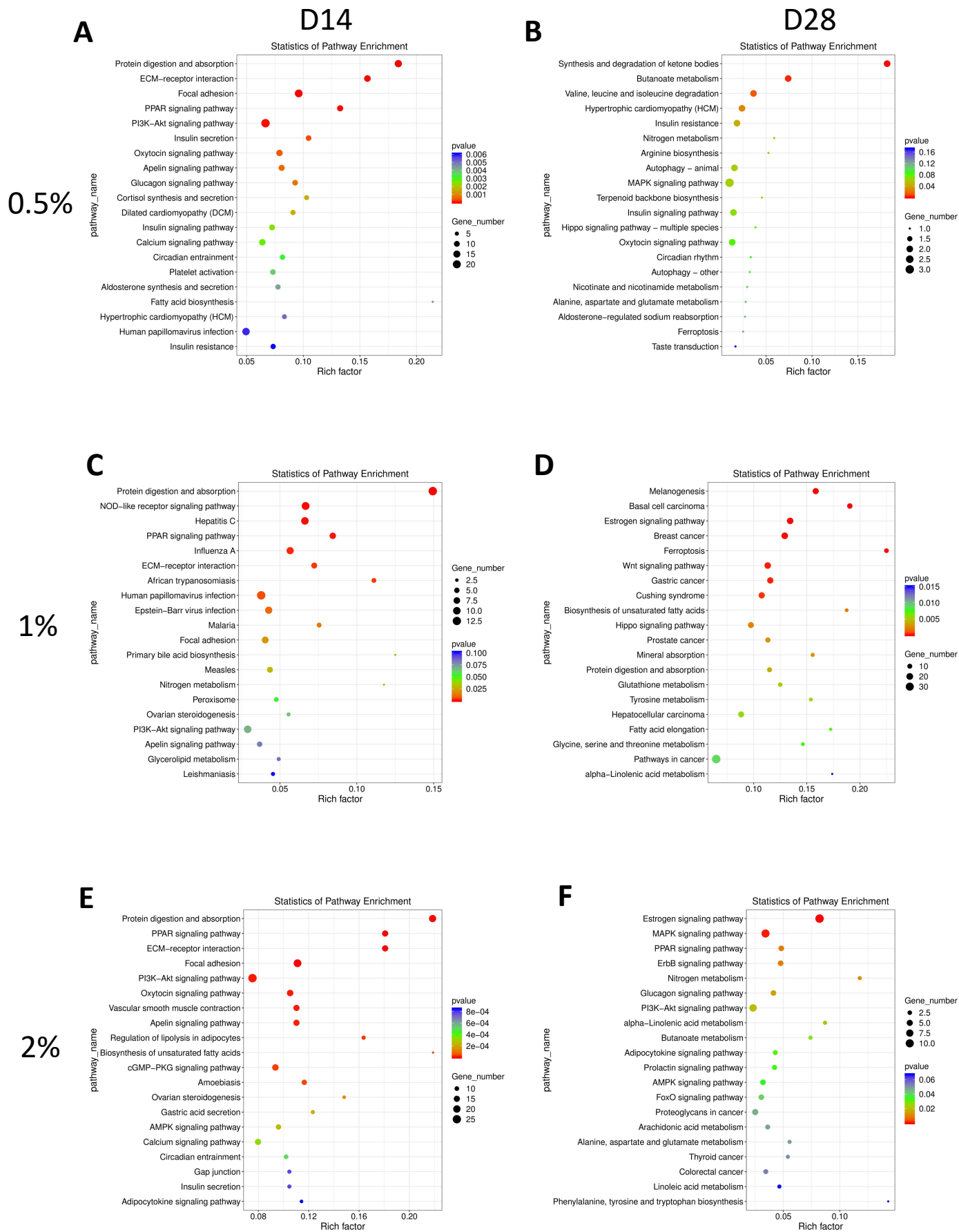
(D)Scatter plot for GO analysis based on RNAseq data from mice treated with 1%SA or gel vehicle for 14 days.

(E)Heatmap of differentially expressed genes in 2%SA group and control group.

(F)Scatter plot for GO analysis based on RNAseq data from mice treated with 2%SA or gel vehicle for 14 days.



Supplementary Figure 2 | SA regulates genes associated with keratinization, lipid metabolic process on day 28
 (A) Heatmap of differentially expressed genes in 0.5%SA group and control group.
 (B) Scatter plot for GO analysis based on RNAseq data from mice treated with 0.5%SA or gel vehicle for 28 days.
 (C) Heatmap of differentially expressed genes in 1%SA group and control group.
 (D) Scatter plot for GO analysis based on RNAseq data from mice treated with 1%SA or gel vehicle for 28 days.
 (E) Heatmap of differentially expressed genes in 2%SA group and control group.
 (F) Scatter plot for GO analysis based on RNAseq data from mice treated with 2%SA or gel vehicle for 28 days.



Supplementary Figure 3 | KEGG enrichment of dorsal skin

(A) Scatter plot for KEGG analysis based on RNAseq data from mice treated with 0.5%SA or gel vehicle for 14 days.

(B) Scatter plot for KEGG analysis based on RNAseq data from mice treated with 0.5%SA or gel vehicle for 28 days.

(C) Scatter plot for KEGG analysis based on RNAseq data from mice treated with 1%SA or gel vehicle for 14 days.

(D) Scatter plot for KEGG analysis based on RNAseq data from mice treated with 1%SA or gel vehicle for 28 days.

(E) Scatter plot for KEGG analysis based on RNAseq data from mice treated with 2%SA or gel vehicle for 14 days.

(F) Scatter plot for KEGG analysis based on RNAseq data from mice treated with 2%SA or gel vehicle for 28 days.