

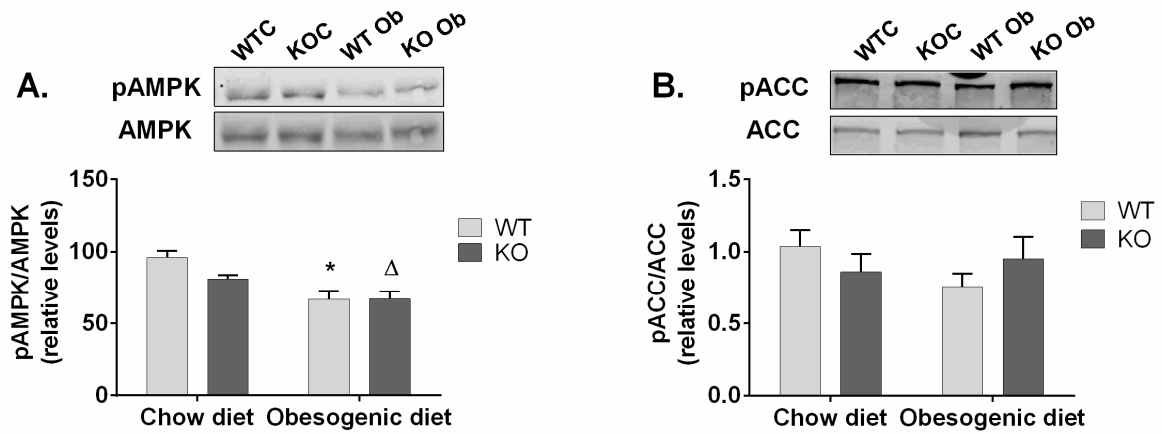
Supplementary Material

Deletion of miRNA-22 Induces Cardiac Hypertrophy in Females but Attenuates Obesogenic Diet-Mediated Metabolic Disorders

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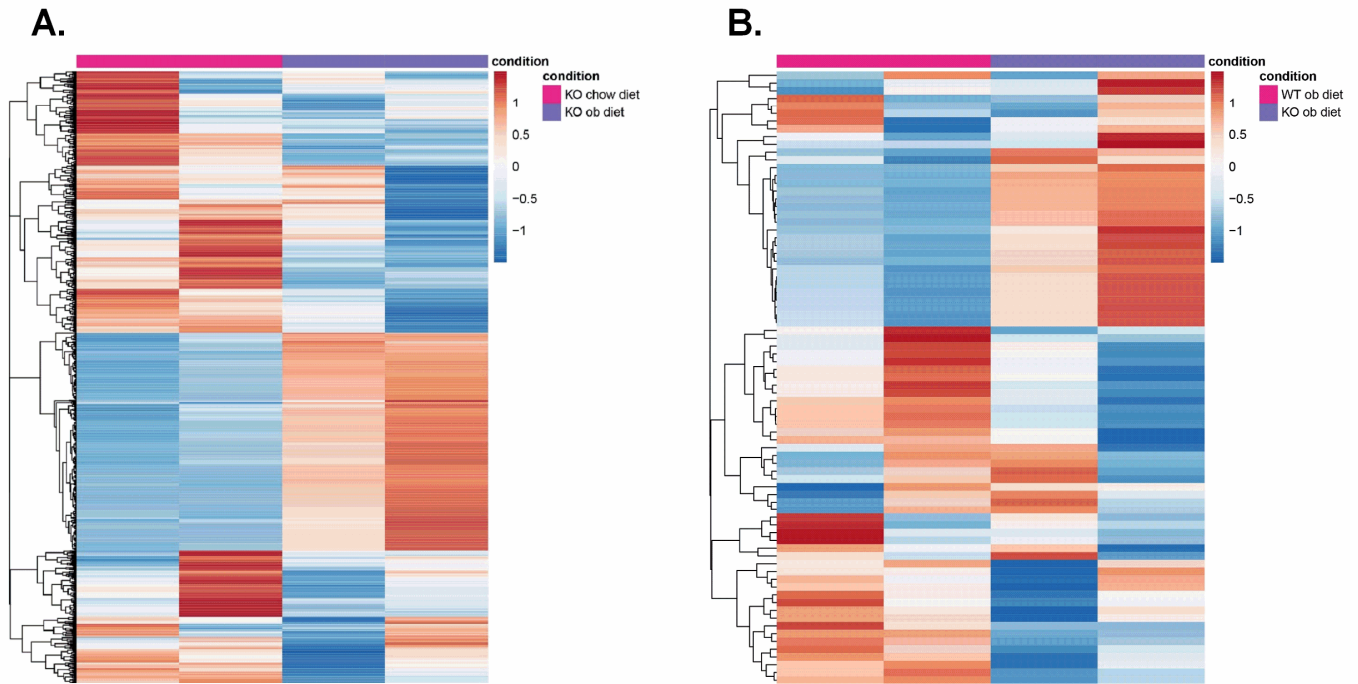
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Supplementary Figure 1



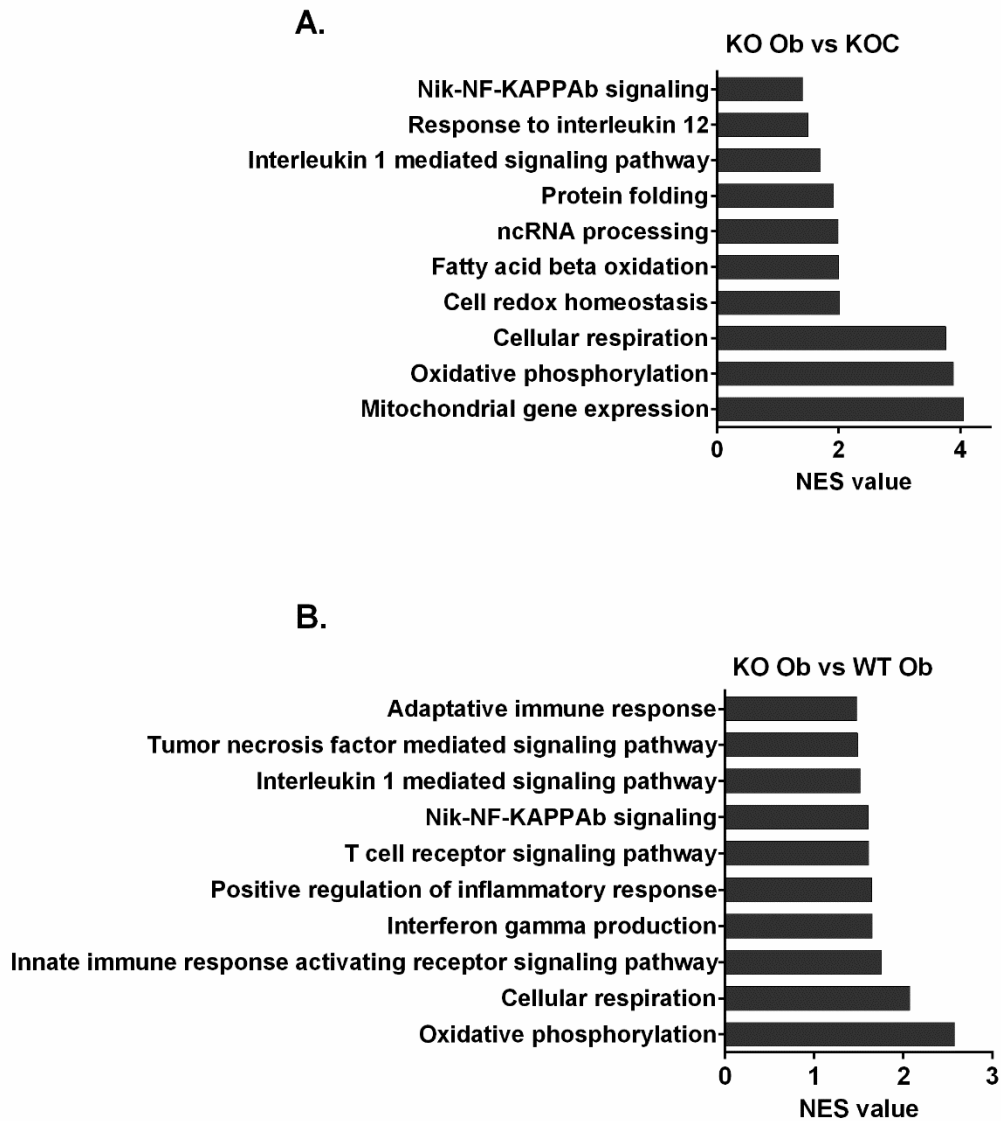
Supplementary Figure 1. MiRNA-22 deletion does not affect the insulin signaling pathway in the skeletal muscle of obese females. (A) Relative protein levels of pAMPK/AMPK ratio and (B) pACC/ACC ratio in gastrocnemius muscle of WT and miR-22 KO female mice fed a chow diet or obesogenic diet (n=4-9). * WT obesogenic diet vs WT chow diet ($p < 0.05$); Δ KO obesogenic diet vs WT chow diet ($p < 0.05$).

Supplementary Figure 2



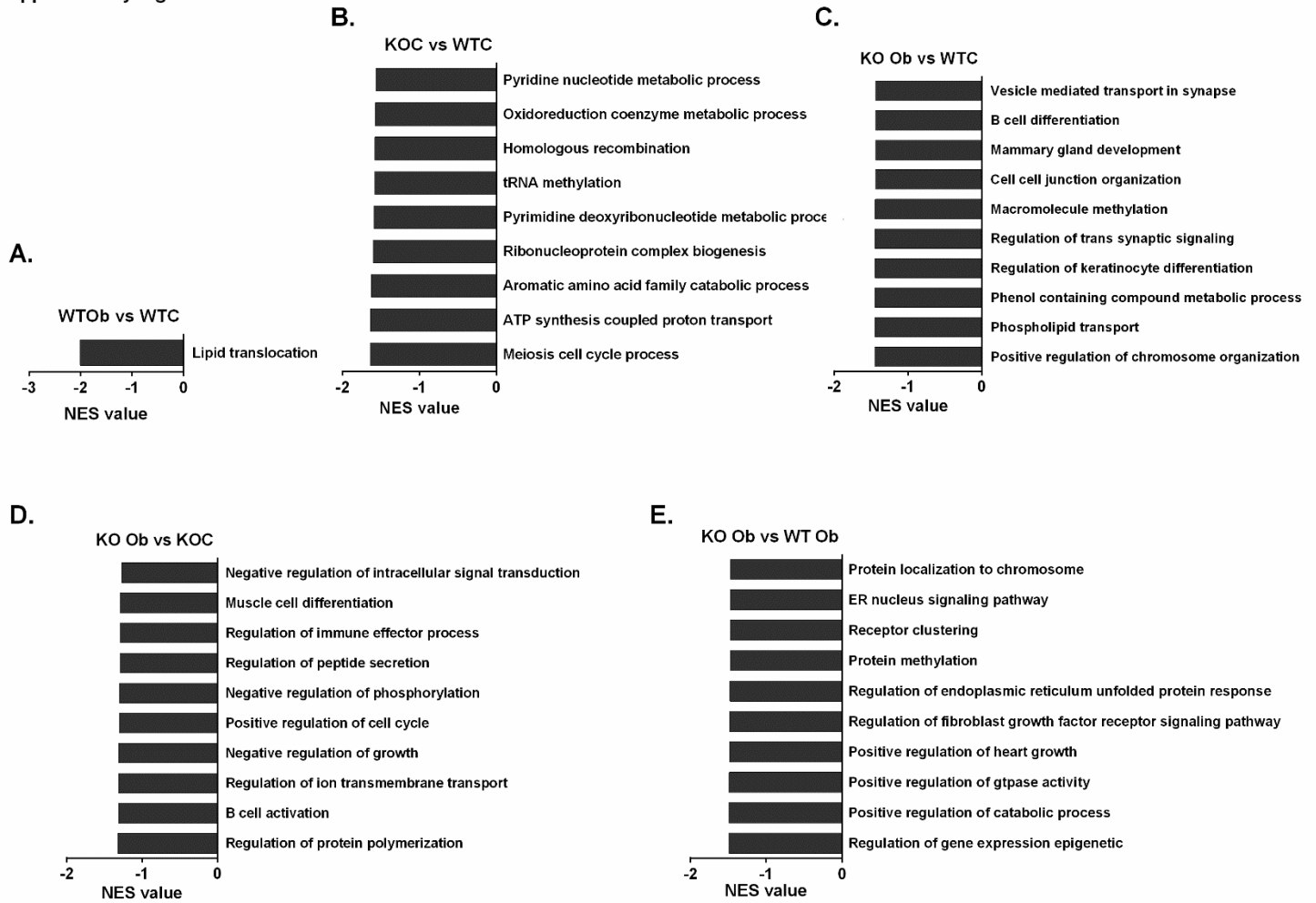
Supplementary Figure 2. mRNA expression profile in heart of females. (A) Heatmap comparing the differential gene expression between miR-22 KO obese females vs miR-22 KO females fed a chow diet and **(B)** miR-22 KO obese females vs WT obese females. The up-regulated genes are shown in red and down-regulated genes in blue (n=2).

Supplementary Figure 3



Supplementary Figure 3. Enrichment pathways. (A) Gene ontology (GO) enrichment analysis by the GSEA, providing the up-regulated pathways enriched GO terms Biological Process ($FDR \leq 0,25$; $p\text{-value} \leq 0.05$; positive NES value).

Supplementary Figure 4



Supplementary Figure 4. Enrichment pathways. (A-E) Gene ontology (GO) enrichment analysis was performed using the Gsea, providing the down-regulated pathways ($FDR \leq 0,25$; $p\text{-value} \leq 0.05$; positive NES value).