Supplementary materials

Farrerol ameliorates diabetic cardiomyopathy by inhibiting ferroptosis via miR-29b-3p/SIRT1 signaling pathway in endothelial cells

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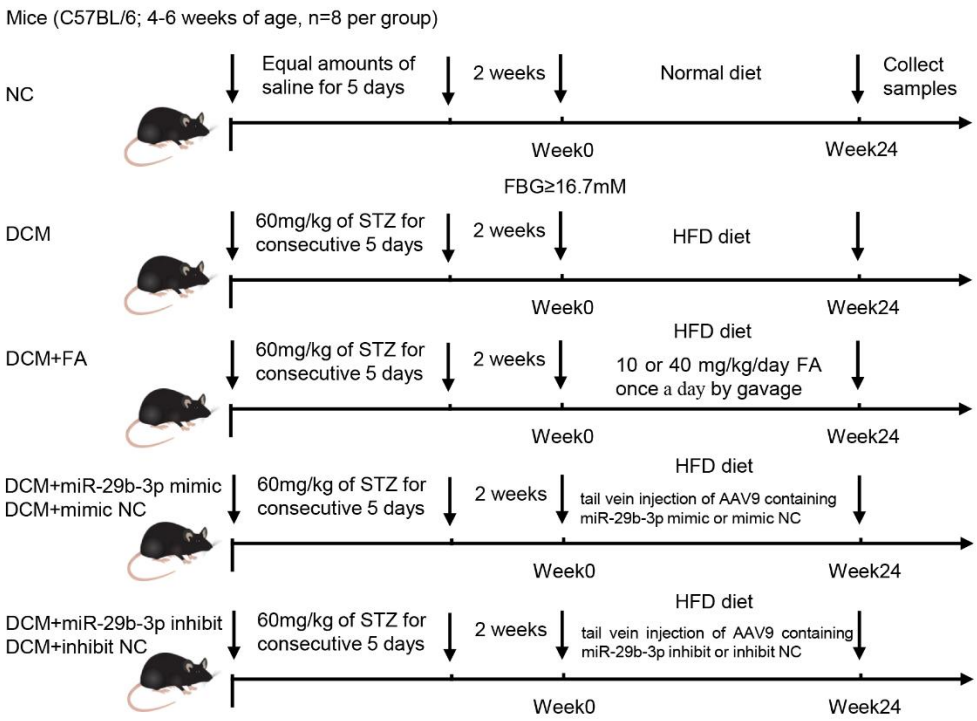
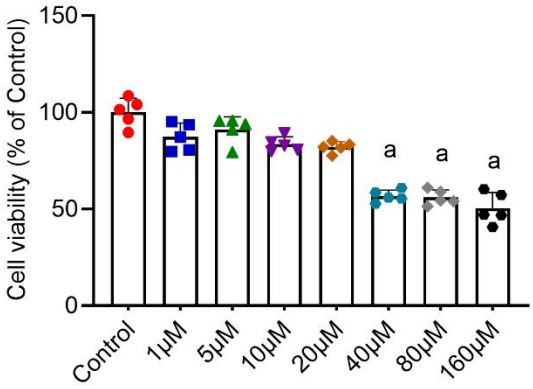
Supplementary Table 1. Primer sequences used for RT-qPCR.

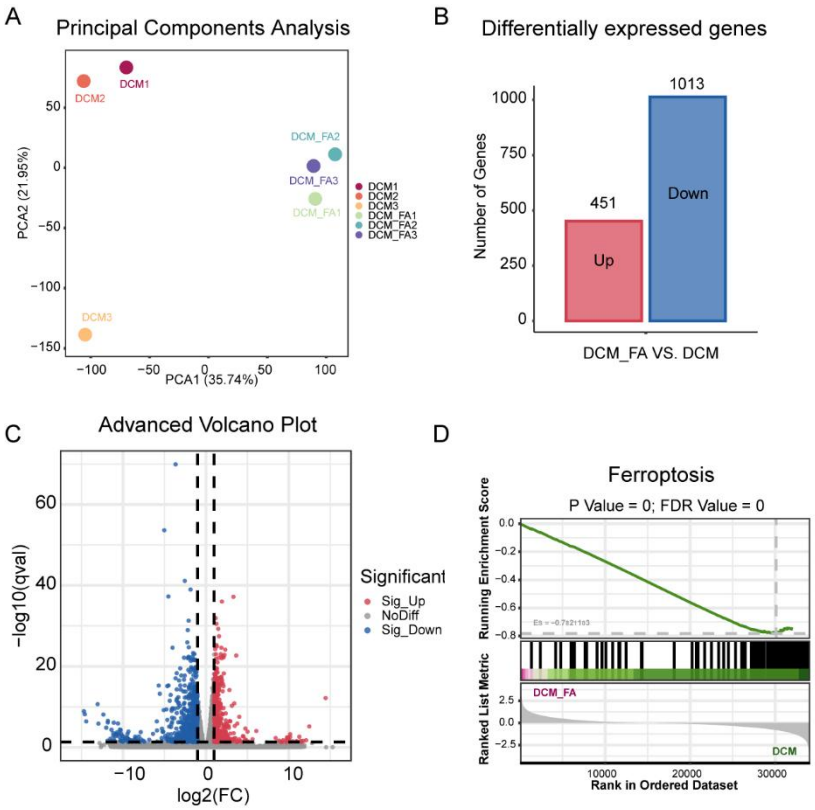
Gene	Forward (5′-3′)	Reverse (5′-3′)
MiR-29a-3p	CGCGTAGCACCATCTGAAAT	AGTGCAGGGTCCGAGGTATT
SIRT1	TGCTGGCCTAATAGAGTGGCA	CTCAGCGCCATGGAAAATGT
GAPDH	ATGGGGAAGGTGAAGGTCG	GGGGTCATTGATGGCAACAATA
U6	AGAGAAGATTAGCATGGCCCCTG	AGTGCAGGGTCCGAGGTATT



Supplementary Figure 1. Flowchart of animal experiments in this study.

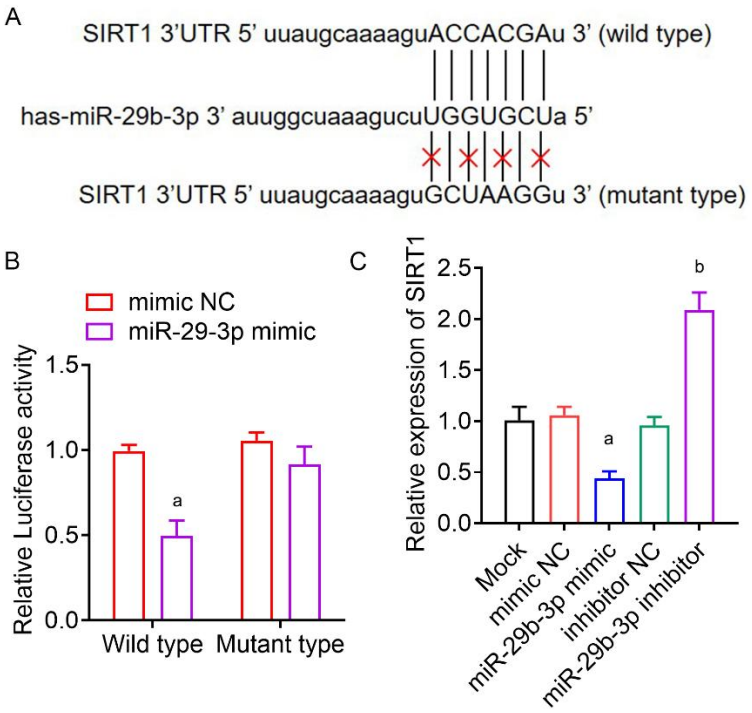


Supplementary Figure 2. The effects of Farrerol (FA) on HUVECs. Cell viability of HUVECs cells with a series of concentration of FA treatment for 24h. [a]$P < 0.05$ vs. control.



Supplementary Figure 3. RNA-sequencing of FA-treated diabetic hearts. (A) principal component analysis (PCA) showed the difference between the FA-treated mice and DCM mice. (B) RNA-sequencing data of differentially expressed genes (DEGs) among the two groups. (C) The heatmap displays the DEGs with a log2 fold change > 1 and $p < 0.05$ between the two groups. (D) Gene Set Enrichment Analysis (GSEA)

indicates that ferroptosis is associated with FA-mediated improvement of diabetic cardiomyopathy.



Supplementary Figure 4. SIRT1 was a target of miR-29b-3p. (A) The potential binding sequences between miR-29b-3p and SIRT1. (B) The luciferase activity in HUVECs cells co-transfected with miR-29b-3p /miR-NC and SIRT1-WT/SIRT1-Mut was measured by dual-luciferase reporter assay. (C) After transfected with miR-29b-3p mimic or mimic NC, miR-29b-3p inhibitor or inhibitor NC, the expression of SIRT1 was detected by RT-qPCR assay. $^{a}P < 0.05$ vs. mimic NC; $^{b}P < 0.05$ vs. inhibitor NC.