

Figure S1. RT-qPCR determination of miR-142-3p levels in H9c2 cells or cardiac tissues of mice. (A) Transfection with miR-142-3p (miR) mimic in H9c2 cells for 48 h caused a significant increase of miR-142-3p level compared with the NC mimic group. n=4. (B) Tail vein injection with miR anti-ago caused a significant decrease of miR-142-3p levels in mice cardiac tissues 7 days after the first injection compared with the NC antagomir group detected by RT-qPCR. n=4. **P<0.01. RT-qPCR, reverse transcription-quantitative PCR; miR, microRNA; Ctrl, control; NC, negative control; miR anti-ago, miR-142-3p antagomir.

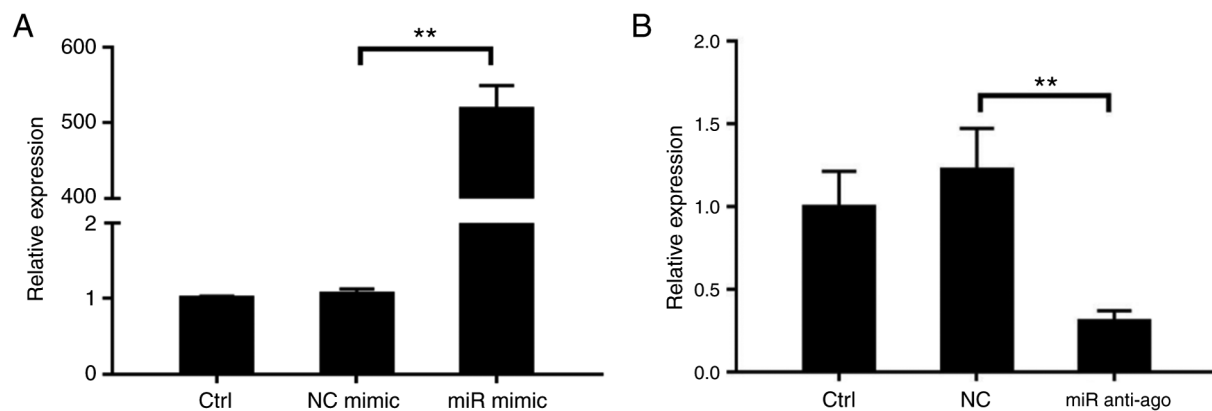


Figure S2. RUNX1 and DRD2 proteins are successfully over-expressed in H9c2 cells. (A) RUNX1 protein levels in H9c2 cells transfected with Runx1 plasmid for 48 h were detected using western blotting. (B) Summary for the protein expression of RUNX1 based on (A). n=3. (C) DRD2 protein levels in H9c2 cells transfected with DRD2 plasmid for 48 h were detected using western blotting. (D) Summary for the protein expression of DRD2 based on (C). n=3. **P<0.01. RUNX1, runt-related transcription factor 1; DRD2, dopamine receptor D2; Ctrl, control.

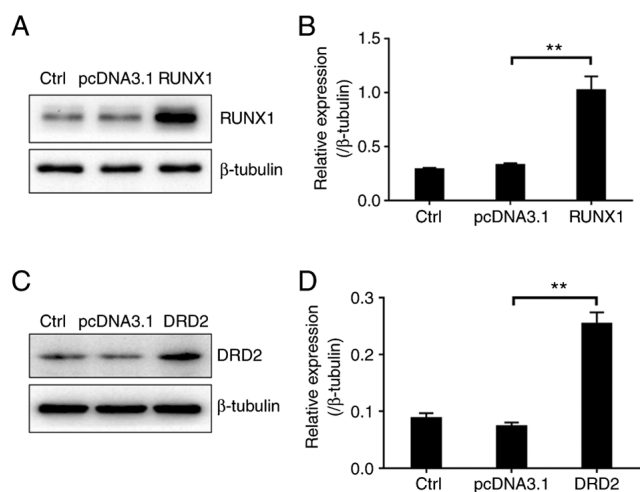


Figure S3. Expression of DRD2 protein in mice cardiac tissues detected using western blotting. (A) Representative western blotting images showed that tail vein injection with AAV-DRD2 caused a significant increase of DRD2 in mice cardiac tissues 20 days after the first injection compared with the AAV-Ctrl injection group. (B) Bar diagram showed the protein expression of DRD2 based on (A). n=3. **P<0.01. DRD2, dopamine receptor D2; AAV, adeno-associated virus; Ctrl, control.

