

Supplemental Figure Legends

Figure S1: Image of Figure 1A with a higher resolution.

Figure S2: miRNA expression analysis indicated the enrichment of miR-708 in the hearts of embryos and neonatal mice, while decreased in the hearts of adult mice.

Figure S3: Representative images for HE staining of the hearts from control, NLE-miR-NC and NLE-miR-708 treated mice.

Figure S4: miRNA expression analysis indicated the increased level of miR-708 in the hearts after ISO treatment.

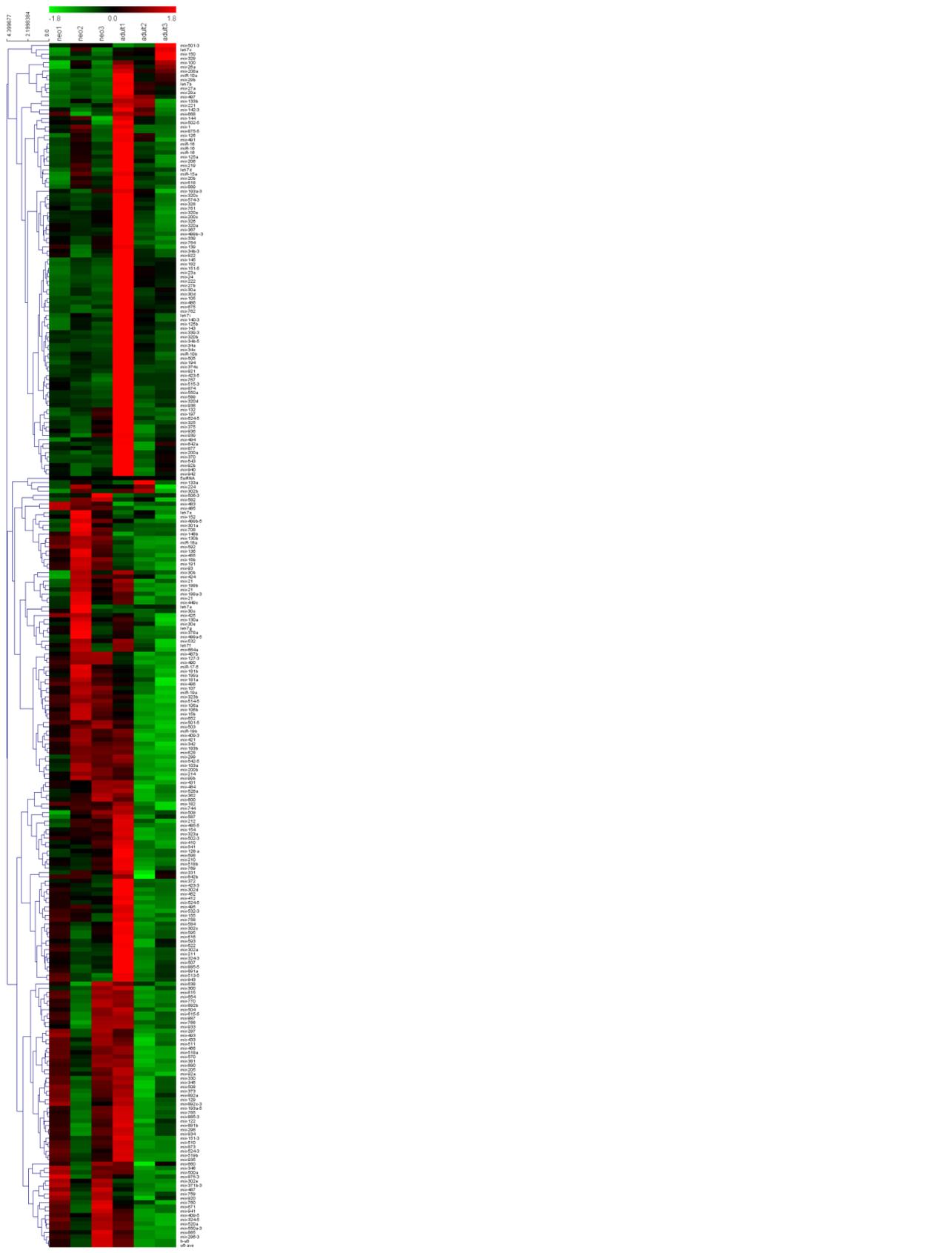
Figure S5: The increased levels of LVID (mm) in the mice treated by ISO at day 5, day 10 and day15, which was partly rescued at day 5 by *in vivo* delivery of miR-708. Data are presented as mean \pm SEM (n=7). *p<0.05.

Figure S6: Sequence BLAST analysis identified three binding sites to miR-708 in the 3'UTR of rat Mapk14 mRNA (A). The second site from the three is highly conserved with the binding site in the 3'UTR of mouse Mapk14 (B).

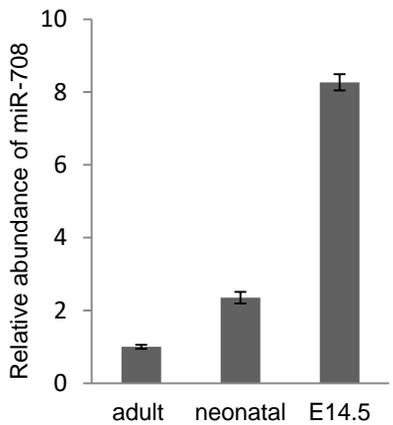
Figure S7: Original image for Figure 6G.

Figure S8: Original image for Figure 6H.

Supplemental Figure 1

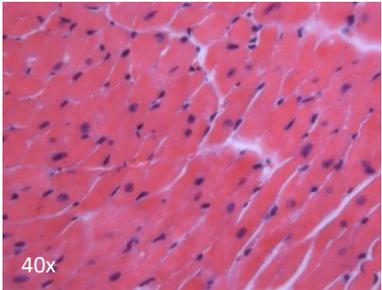


Supplemental Figure 2

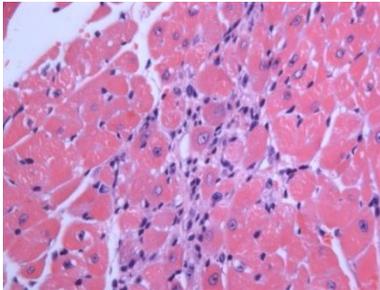


Supplemental Figure 3

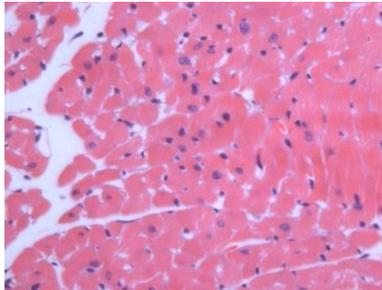
NC



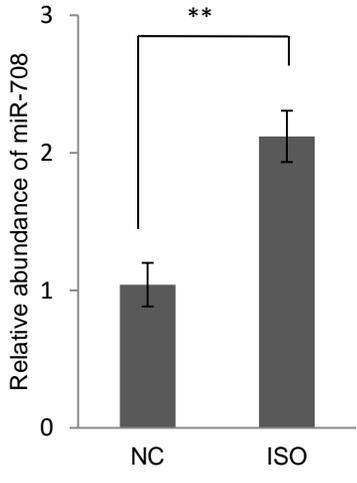
NLE-miR-NC



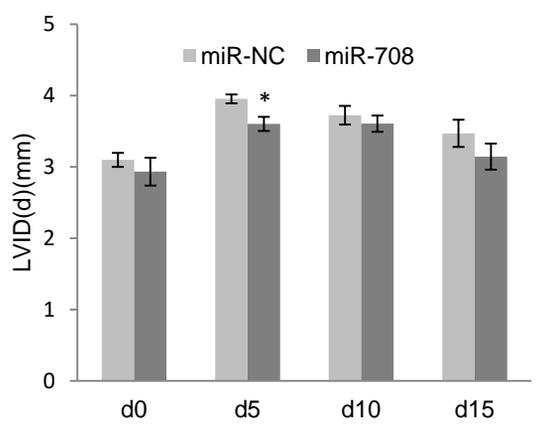
NLE-miR-708



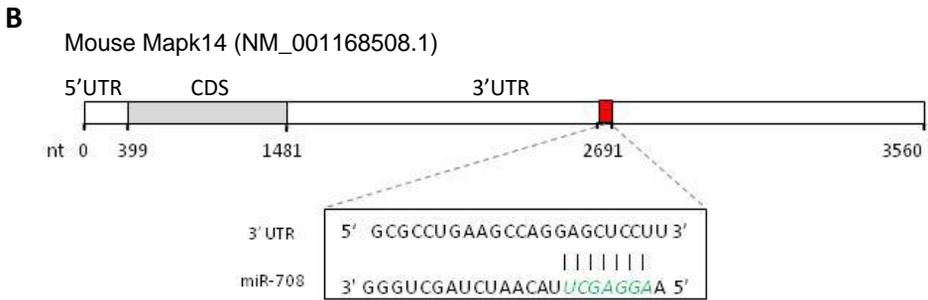
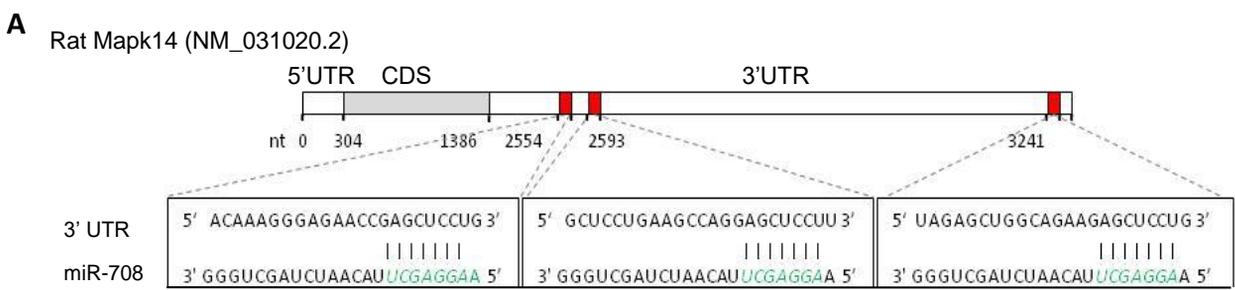
Supplemental Figure 4



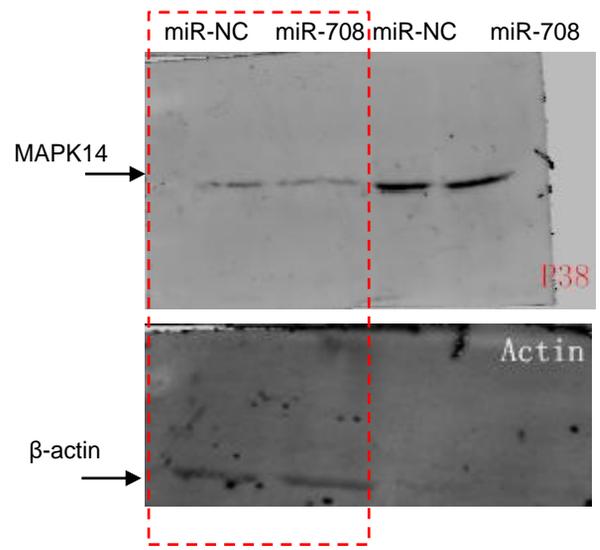
Supplemental Figure 5



Supplemental Figure 6



Supplemental Figure 7



Supplemental Figure 8

