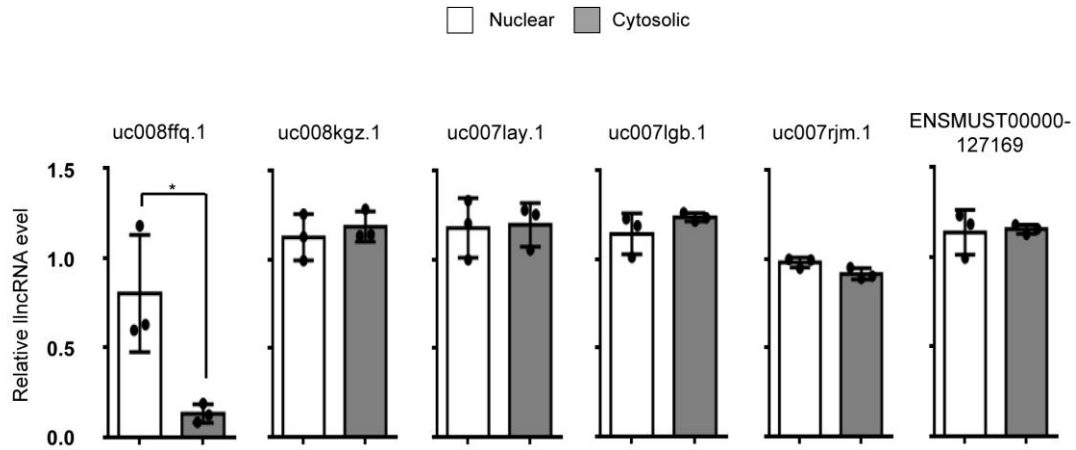
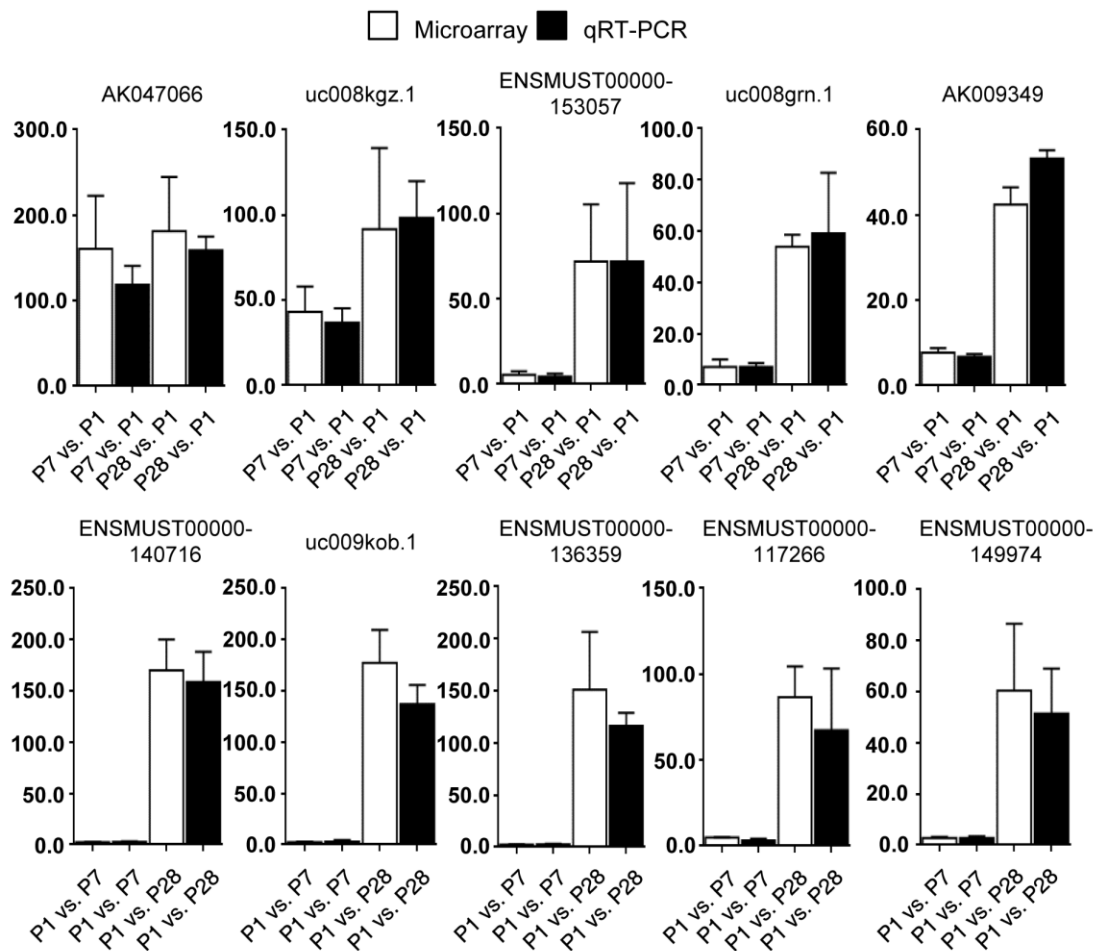

Profiling analysis of long non-coding RNAs in early postnatal mouse hearts

Xionshan Sun,^{1,2,*} Qi Han,^{1,2,*} Hongqin Luo,^{1,2} Xiaodong Pan,^{1,2} Yan Ji,^{1,2} Yao Yang,^{1,2}
Hanying Chen,³ Fangjie Wang,^{1,2} Wenjing Lai,^{1,2} Xiao Guan,^{1,2} Qi Zhang,^{1,2} Yuan Tang,^{1,2}
Jianhong Chu,^{4,5} Jianhua Yu,⁴ Weinian Shou,^{1,2,3} Youcai Deng,^{1,2} Xiaohui Li^{1,2}

Supplementary Figures and Figure Legends

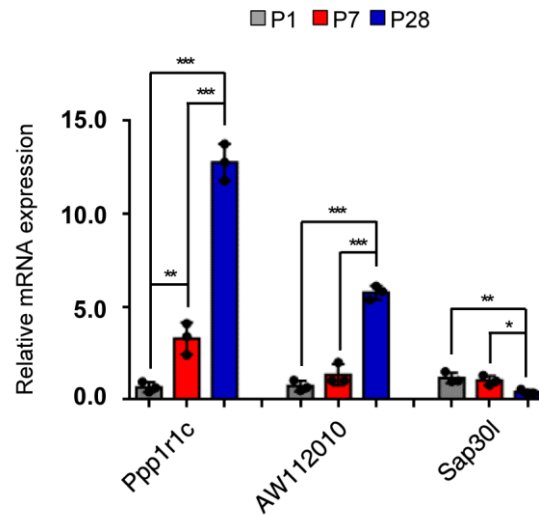


Supplementary Figure S1. The cytosolic and nuclear distribution of lincRNAs determined by qRT-PCR analysis. The RNA levels of lincRNAs in both cytoplasm and nucleus were determined *via* real time qRT-PCR. Data are presented as mean \pm S.D. * indicates $p < 0.05$, which denote statistical comparison between the two marked groups. Paired two-tailed Student's *t*-test was used ($n = 3$ cultures per group).

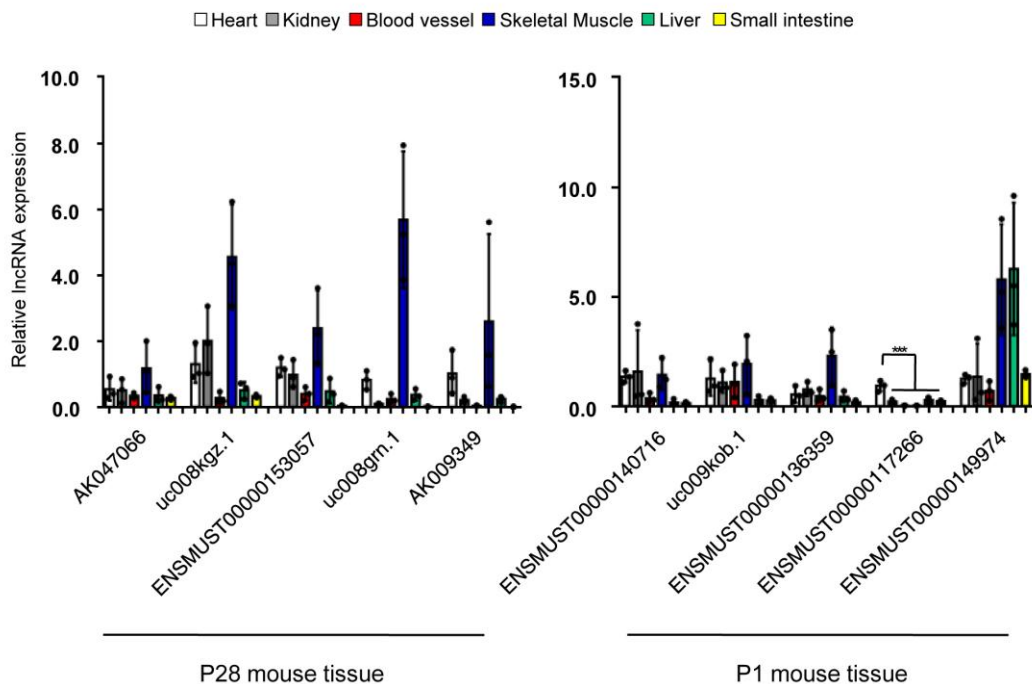


Supplementary Figure S2. Microarray validation of the top 10 lincRNAs by real time qRT-PCR. Fold changes between P1 and P7 or P1 and P28 of the top 10 lincRNAs are shown

for both microarray and qRT-PCR data, respectively. Data are presented as mean \pm S.D.



Supplementary Figure S3. Microarray validation of the 3 differentially expressed neighboring genes by real time qRT-PCR. The mRNA levels of *Ppp1r1c*, *AW112010* and *Sap30l*, related to lncRNA uc008kgz.1, uc008grn.1, and ENSMUST00000117266, respectively, in P1, P7 and P28 mouse heart were validated by real time qRT-PCR. Data are normalized to *18S*. Data are shown as mean \pm S.D. *, ** and *** indicate $p < 0.05$, $p < 0.01$ and $p < 0.001$, respectively, which denote statistical comparison between the two marked groups. One-way ANOVA (*post hoc*: LSD multiple comparison test) was used.



Supplementary Figure S4. Tissue specificity validation of the top 10 lncRNAs by using *18S* as an internal control. The expression levels of the top 10 lncRNAs in different mouse

tissues that contain smooth muscle cells were determined by real time qRT-PCR. Data were normalized to *18S*. Data are shown as mean \pm S.D. *, ** and *** indicate $p < 0.05$, $p < 0.01$ and $p < 0.001$, respectively, which denote statistical comparison between the two marked groups. One-way ANOVA (*post hoc*: LSD multiple comparison test) was conducted. (n = 3 samples per time point).