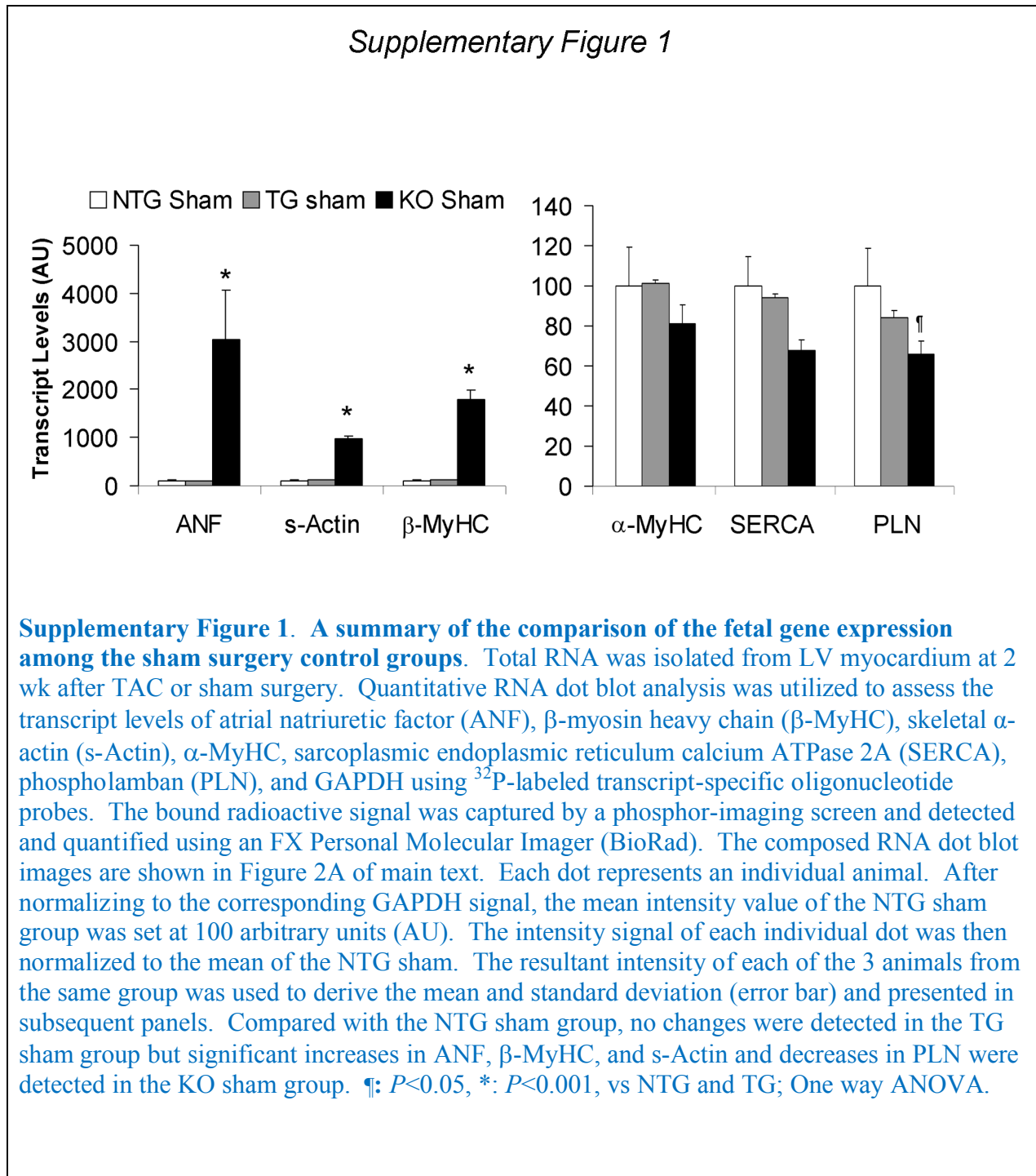
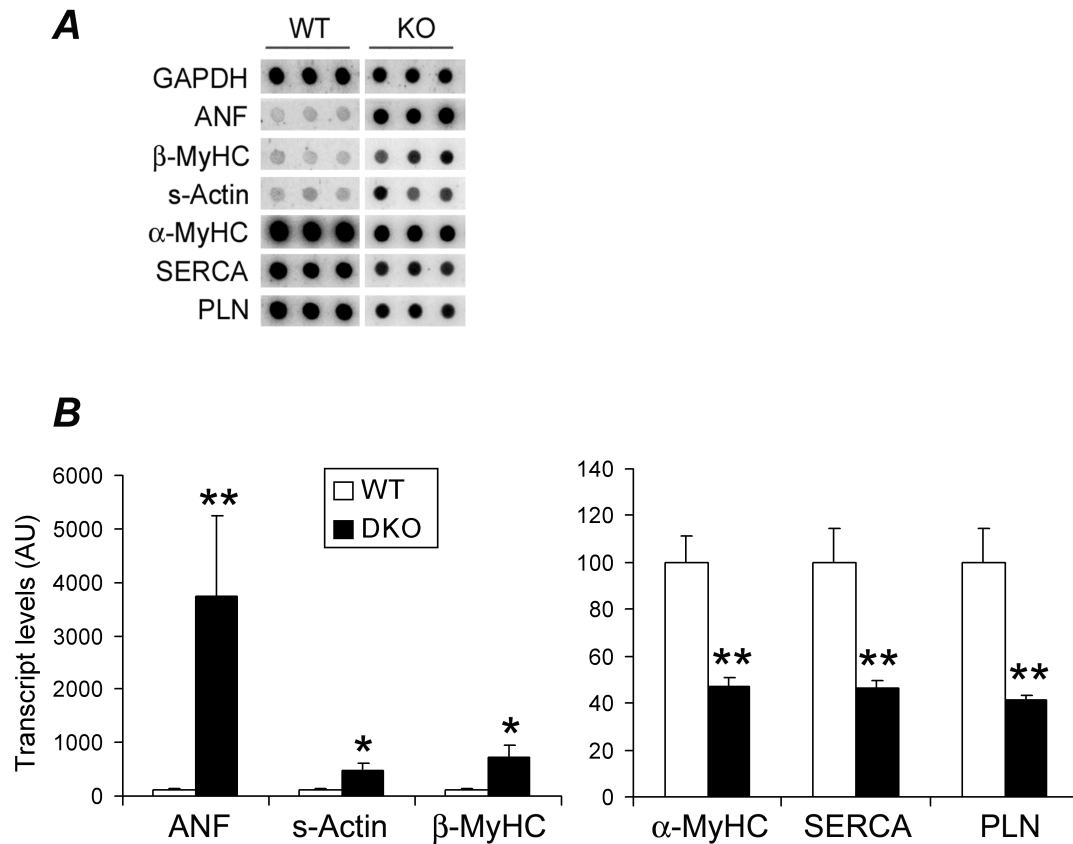


Supplementary Data



Supplementary Figure 2



Supplementary Figure 2. Reactivation of the fetal gene program in *CryAB/HSPB2* null (KO) mouse hearts at 18 wks of age. Total RNA was isolated from the LV myocardium. Quantitative RNA dot blot analysis was performed to assess the transcript levels of atrial natriuretic factor A (ANF), β -myosin heavy chain (β -MyHC), skeletal α -actin (s-Actin), α -MyHC, sarcoplasmic endoplasmic reticulum calcium ATPase 2A (SERCA), phospholamban (PLN), and GAPDH using 32 P-labeled transcript-specific oligonucleotide probes. The bound radioactive signal was captured by a phosphor-imaging screen and detected and quantified using an FX Personal Molecular Imager (BioRad). The composed RNA dot blot images are shown in panel A. Each dot represents an individual animal. After normalizing to the corresponding GAPDH signal, the mean intensity value of the wild type (WT) group was arbitrarily set at 100 arbitrary units (AU). The intensity signal of each individual dot is then normalized to the mean of the WT. The resultant AU value of each of the 3 animals from the same group was used to derive the mean and standard deviation (error bar) and presented in panel B. Compared with the WT, *: $P < 0.05$, **: $P < 0.001$; unpaired t-test were used.

Supplementary Table 1. Baseline Characterization of CryAB TG and CryAB/HSPB2 KO Mice at 10 Weeks of Age

	NTG	TG	KO
Echocardiography			
Heart rate (bpm)	490±46	459±45	462±32
LVIDd (mm)	3.77±0.18	3.56±0.18	3.57±0.26
LVIDs (mm)	2.37±0.19	2.18±0.18	2.29±0.24
LVPWd (mm)	0.76±0.04	0.73±0.09	0.92±0.04*
FS (%)	37.1±2.7	38.6±3.7	36.1±3.4
EF (%)	67.8±3.5	69.8±4.6	66.5±4.6
LV pressure			
LVSP (mmHg)	90.7±4.6	85.4±12.4	90.3±12.3
LVEDP (mmHg)	5.5±1.0	4.7±2.4	18.3±2.9*
+dP/dt _{max} (mmHg/s)	8620±1406	7742±1246	9101±1242
-dP/dt _{max} (mmHg/s)	7673±860	7888±1301	6196±1065 [†]
Gravimetry			
Body weight (BW, g)	27.5±2.5	30.4±3.3	25.3±2.2
Heart weight (HW, g)	123.7±8.4	132.5±7.8	131.7±13
HW/BW (mg/g)	4.52±0.4	4.38±0.2	5.24±0.7 [†]
Lung/BW (mg/g)	5.4±0.6	5.3±0.5	5.4±0.5
Liver/BW (mg/g)	46.0±3.0	42.6±2.2	46.2±5.0
Kidney/BW (mg/g)	13.8±0.2	14.7±0.9	14.3±1.8

Compared with NTG, [†]: p<0.05; *: p<0.01.

Supplementary Table 2. Baseline Characterization of CryAB/HSPB2 KO Mice at 18**Weeks of Age**

	NTG	KO
Echocardiography	N=11	N=11
Heart rate (bpm)	473±31	472±26
LVIDd (mm)	3.81±0.23	3.90±0.23
LVIDs (mm)	2.43±0.19	2.66±0.20
LVPWd (mm)	0.75±0.08	0.85±0.06*
FS (%)	36.4±2.7	31.9±1.61*
EF (%)	66.7±3.5	60.7±2.4*
LV pressure	N=5	N=6
Heart rate (bpm)	540±93	541±75
LVSP (mmHg)	96.5±4.8	92.7±8.3
LVEDP (mmHg)	6.5±3.0	18.8±9.2 [†]
+dP/dt _{max} (mmHg/s)	11632±2254	9041±1160
-dP/dt _{max} (mmHg/s)	10630±1586	7878±1455 [†]
Tau (ms)	7.3±2.3	11.7±2.6 [†]
Gravimetry	N=8	N=10
Body weight (BW, g)	27.2±4.2	26.6±3.9
Heart weight (HW, g)	113.1±13.9	122.8±17.9
HW/BW (mg/g)	4.19±0.35	4.62±0.29 [†]
Lung/BW (mg/g)	5.58±0.59	5.40±0.39

Compared with NTG, [†]: p<0.05; *: p<0.01.