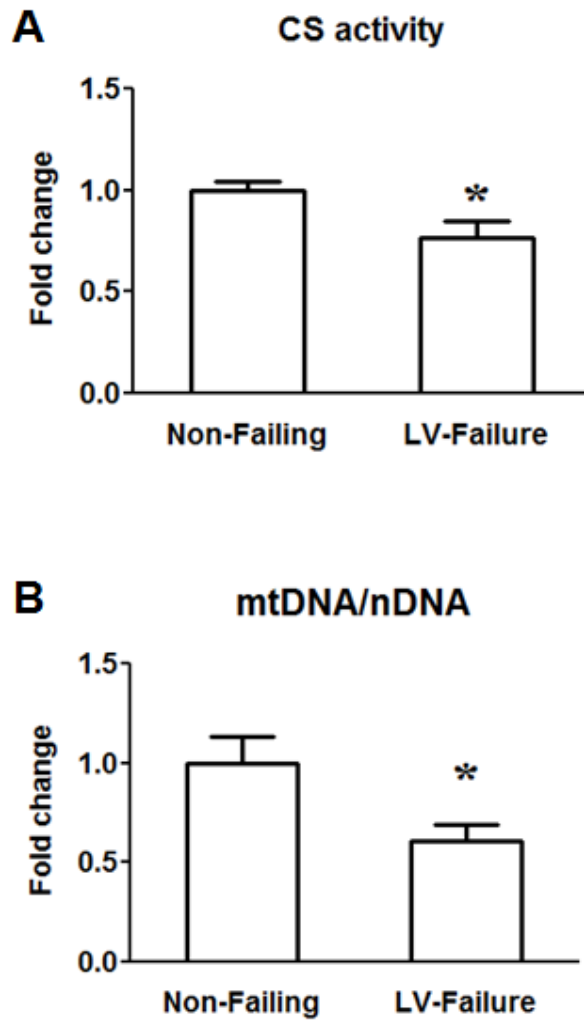


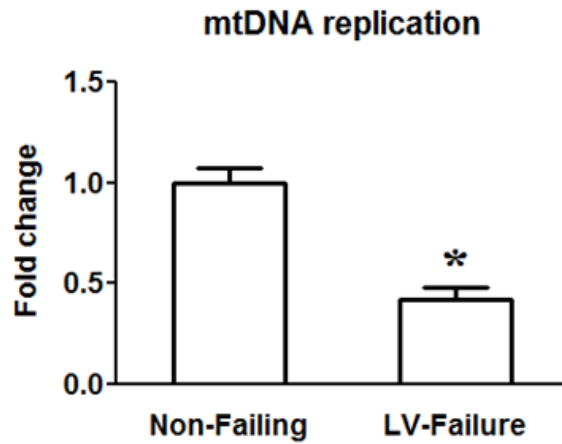
## SUPPLEMENTAL MATERIAL

**Supplemental Table 1.** Primer Sequence for Real-Time PCR

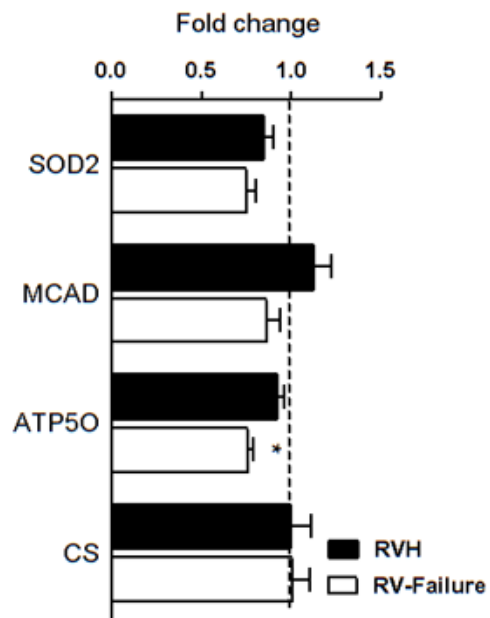
<b>Gene Name</b>	<b>Forward</b>	<b>Reverse</b>
<b>PGC-1<math>\alpha</math></b>	TGACACAACACGGACAGAAC	GCATCACAGGTATAACGGTAGG
<b>PGC-1<math>\beta</math></b>	AACTTCTGGCTCAAGACGTGCTCT	TCTTGGGTGAAGCTGCGATCCTTA
<b>NRF1</b>	GGCACTGTCTCACTTATCCAGGTT	CAGCCACGGCAGAATAATTCA
<b>NRF2B2</b>	TGAAACGGGTGTATCTGCTG	GAACAACTACTTGCTGAATGGC
<b>NFR2A</b>	AGAAGCTCACCTGGGAACAGAACA	CTGTGCAACCAGTTCAGGCTGATT
<b>TFAM</b>	AATGGATAGGCACAGGAAACC	CAAGTATTATGCTGGCAGAAGTC
<b>TFB1M</b>	GGACACTCGATTTATTCCTGGATT	ACATCTCCATGAACAATTCTCAGTTT
<b>TFB2M</b>	TCTGGCAATTAGCTTGTGAGATTAA	CCTACGCTTTGGGTTTTCCA
<b>POLG</b>	TGTCAACCAGAACTGGGAGCGTTA	TGGCCAGATCCATCAACGACTTCT
<b>TOP1MT</b>	TTATCCTACAACCGAGCCAACCGA	TCTTTGCCTGGATCTTCGTCTGGA
<b>SSBP1</b>	TGCTCGGGTTAGATCGTCAGGAAA	GCCCAAGTAAGTGACACACGATTCA
<b>TWINKLE</b>	ATTGTAGAAGGACGTGGACGCGAA	TGCAGAGCTCACTCTAGGTGCATT
<b>16S rRNA</b>	CGCATAAGCCTGCGTCAGATCAAA	TGTGTTGGGTTGACAGTGAGGGTA
<b>ND6</b>	ATAGGATCCTCCCGAATCAACCCT	AGGATTGGTGCTGTGGGTGAAAGA
<b>COI</b>	ACCCTAGACCAAACCTACGCCAAA	TAGGCCGAGAAAGTGTGTGGGAA
<b>CYTB</b>	AGTCCCACCCTCACACGATTCTTT	AGTAAGCCGAGGGCGTCTTTGATT
<b>18S rRNA</b>	GTAACCCGTTGAACCCATT	CCATCCAATCGGTAGTAGCG



**Supplemental Figure 1.** Assessment of mitochondrial mass and mtDNA content in the LV. (A) Citrate Synthase activity and (B) mtDNA content normalized to nDNA in LV failure (n=8) compared to the Non-Failing LV controls (n=5). Data are given as the mean of the fold changes  $\pm$  SEM relative to the Non-Failing RV (\*  $p \leq 0.05$  vs. Non-Failing).



**Supplemental Figure 2.** Impaired mtDNA replication in LV failure. MtDNA replication was assessed by measuring the extension of 7S DNA beyond the D-Loop and normalized to mtDNA in LV failure (n=8) compared to the Non-Failing LV controls (n=5). Data are given as the mean of the fold changes  $\pm$  SEM relative to the Non-Failing RV (\*  $p \leq 0.05$  vs. Non-Failing).



**Supplemental Figure 3.** mRNA expression of nDNA encoded mitochondrial proteins. Mean of the fold changes  $\pm$  SEM in gene expressions for nDNA genes encoding mitochondrial proteins in the RVH (n=25) and RV-failure (n=6) relative to Non-Failing controls (indicated by the dashed line; n=5; \*  $p \leq 0.05$  vs. Non-Failing).