Article

Mitochondria isolated from hearts subjected to ischemia/reperfusion benefit from adenine nucleotide translocase 1 overexpression

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Hemodynamic parameters

	dP/dt max (mmHg/sec)	
	Baseline	R120
WT	2600 ± 171	1150 ± 148***
ANT1-TG	2237 ± 108	1316 ± 115***
	dP/dt min (mmHg/sec)	
	Baseline	R120
WT	-1513 ± 119	-836 ± 93***
ANT1-TG	-1384 ± 85	-889 ± 72***
	P sys (mmHg)	
	Baseline	R120
WT	87.9 ± 9.3	62.4 ± 6.7*
ANT1-TG	73.4 ± 3.1	57.9 ± 4.3**
	LVDP (mmHg)	
	Baseline	R120
WT	78.1 ± 9.6	30.3 ± 4.3***
ANT1-TG	62.0 ± 3.2	34.3 ± 3.1***
	HR (bpm)	
	Baseline	R120
WT	206.5 ± 15.0	231.2 ± 24.3
ANT1-TG	212.7 ± 8.8	239.9 ± 14.0

Table S1. The following hemodynamic parameters were recorded during the pre-ischemic stabilization phase (baseline) and after 120 minutes (R 120) of reperfusion: the maximal rate of left ventricular pressure (dP/dt max), the minimal rate of left ventricular pressure (dP/dt min), systolic pressure (P sys), (left ventricular developed pressures (LVDPs) and heart rates (HRs). WT, n=15, ANT1-TG, n=19. Data represent the mean ± SEM. *, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.001$ for baseline vs reperfusion with unpaired t-test.

Western blot analysis

Western blots were performed using a standard protocol (As described in main text), with specific primary antibodies against HSP27 (Santa Cruz Biotechnology, Inc, Heidelberg, Germany).
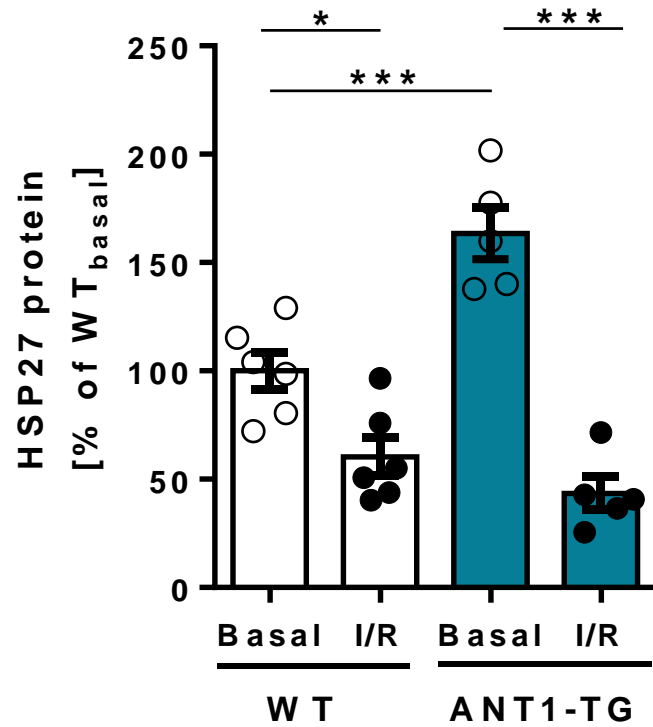

Figure S1. HSP27 expression of rat hearts after I/R. Langendorff-perfused WT and ANT1-transgenic hearts were exposed to 45 minutes of ischemia, followed by two hours of reperfusion. Graph shows the quantitative analysis of HSP27 protein. Data are shown for the pre-ischemic stabilization phase (basal) and after 120 minutes of reperfusion (I/R). Data are presented as the mean ± SEM, *, $p < 0.05$, **, $p < 0.01$, ***, $p < 0.001$ determined by ANOVA.