

Table S4. Effects of Gpx3 knockdown on protein levels in cardiomyocytes

	C	KD
Gpx3	0.444±0.018	0.059±0.009*
calcium channel		
CASR	0.671±0.018	0.408±0.021*
ORAI1	0.695±0.025	0.350±0.017*
SERCA	1.616±0.081	0.615±0.014*
CALM	0.873±0.050	0.165±0.005*
PMCA	1.494±0.053	0.973±0.033*
NCX	0.943±0.051	0.782±0.032*
endoplasmic reticulum stress		
XBP1	1.237±0.033	1.344±0.053*
LAMP	1.214±0.038	0.863±0.038*
GRP78	0.768±0.028	1.043±0.042*
CHOP	1.982±0.097	2.256±0.099*
ATF4	1.080±0.049	1.382±0.018*
inflammation		
COX-2	0.668±0.015	0.915±0.018*
HO-1	0.284±0.007	0.198±0.001*
iNOS	0.601±0.030	1.037±0.045*
NF-κB	0.701±0.018	1.225±0.011*
PTGES	0.240±0.009	0.417±0.014*
TNF-α	0.424±0.019	0.516±0.017*
heat shock proteins		
HSP60	0.457±0.020	0.647±0.012*
HSP70	0.681±0.014	0.829±0.014*
HSP90	0.729±0.004	1.039±0.028*
myocardial contraction		
MYL2	0.535±0.020	0.354±0.013*
MYL3	1.802±0.054	1.499±0.021*
TNNC1	1.777±0.060	0.995±0.010*
TNNT2	0.379±0.016	0.339±0.010*

Values are the mean ± SD (n = 3). \* Indicates significant difference from the corresponding normal ( $P < 0.05$ ). C indicates the control group, KD indicates the knockdown group in vitro.

Effects of Gpx3 knockdown on protein levels in chicken embryos

	Normal-10	siRNA-10
Gpx3	1.199±0.067	0.229±0.016*
calcium channel		
CASR	1.185±0.056	0.323±0.010*
ORAI1	1.452±0.006	0.847±0.042*
SERCA	1.653±0.002	0.973±0.007*
CALM	1.104±0.014	0.622±0.017*
PMCA	0.395±0.006	0.237±0.021*
NCX	1.082±0.046	0.262±0.017*
endoplasmic reticulum stress		
XBP1	0.233±0.010	0.988±0.002*
LAMP	0.641±0.015	0.449±0.015*
GRP78	0.318±0.005	0.533±0.002*
CHOP	0.879±0.001	0.940±0.007*
ATF4	0.378±0.006	0.865±0.001*
inflammation		
COX-2	0.881±0.006	1.022±0.001*
HO-1	0.251±0.007	0.096±0.006*
iNOS	0.322±0.001	0.466±0.018*
NF-κB	0.888±0.010	1.125±0.006*
PTGES	0.247±0.006	0.719±0.012*
TNF-α	0.222±0.011	0.337±0.007*
heat shock proteins		
HSP60	0.492±0.011	0.704±0.007*
HSP70	0.268±0.011	0.578±0.001*
HSP90	0.425±0.134	0.864±0.007*
myocardial contraction		
MYL2	0.336±0.006	0.215±0.016*
MYL3	0.441±0.012	0.330±0.010*
TNNC1	0.550±0.006	0.214±0.007*
TNNT2	0.426±0.005	0.235±0.007*

Values are the mean ± SD (n = 15). \* Indicates significant difference from the corresponding normal ( $P < 0.05$ ). Normal-10 indicates the normal group at 10 days, siRNA-10 indicates the knockdown group at 10 days in vivo.