

## Transport stress induces weight loss and heart injury in chicks: disruption of ionic homeostasis via modulating ion transporting ATPases

### Supplementary Material

Table S1. Oligonucleotides used in the present study.

	Gene	Forward Primer (5'→3')	Reverse Primer (5'→3')	Product length	NCBI accession No.
House keeper	GAPDH	CTTTGGCATTGTGGAGGGTC	ACGCTGGGATGATGTTCTGG	128 bp	NM_204305.1
	β-actin	AGTACCCCATGAACACGGC	CTCCTCAGGGGCTACTCTCA	98 bp	NM_205518.1
Na <sup>+</sup> -K <sup>+</sup> -ATPase associated subunits	1A1	TACAGCCTTCTTTGTCAGCA	CAGCTAGAGCAGTCTCCTCGAA	140 bp	NM_205521.1
	1A2	GCCGCTGTCGTCATTGTCA	TCTCCGCGTTGATTGGAT	142 bp	NM_205476.1
	1A3	CCATCCTCAAGCGTGACGTG	ACTTTGACGGACCCGGACGA	85 bp	NM_205475.1
	1B3	GCAGTTCGTCTACAACCCCA	TAAGCCCTGGACTAGAAATCCG	194 bp	NM_205535.1
	1B4	GCCAGGAGTAATGATCAGACCA	TCATCGTAAGCTGCTAGGAAC	120 bp	NM_001044651.1
Ca <sup>2+</sup> -ATPase associated subunits	2A2	GCGATTTGCTTGCCATGTCAC	ATCAGCCATTGCGTCACGTT	101 bp	NM_001271973.1
	2A3	ACATCCGCATCATTGAAATCCG	ACCCCTGTTGCAATGACGAT	199 bp	NM_204891.1
	2B1	GAAACAAAAGTGAATGTGCCTTGCT	GCAACTTCTCTTCTGGTATCTCATTCCGTA	93bp	NM_001168002.3
	2B2	CTGCCATCTGCTGTCTGTATCTGTG	CCACGAAACTGCTTCTCCTTGCTCC	79bp	XM_015293479.1
	2B4	AGAAAGCCAAGACGTTCC	AATTCATTGTGCCACCT	130bp	XM_015298965.1
	2C1	TTGCCTTTGTTCCAGGAGTACCGAT	TTCCACTCTACCTTCTCGCACAC	98bp	XM_015281760.1

**Table S2. Total Variance Explained of PCA for Figure 7A**

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	10.636	62.562	62.562	10.636	62.562	62.562	5.936	34.919
2	3.629	21.348	83.910	3.629	21.348	83.910	5.815	34.209	69.127
3	2.156	12.682	96.592	2.156	12.682	96.592	4.669	27.465	96.592
4	.193	1.138	97.730						
5	.129	.760	98.490						
6	.075	.441	98.931						
7	.055	.322	99.253						
8	.045	.263	99.516						
9	.036	.211	99.727						
10	.016	.095	99.822						
11	.011	.066	99.888						
12	.008	.048	99.936						
13	.005	.029	99.965						
14	.003	.016	99.980						
15	.002	.014	99.995						
16	.001	.004	99.999						
17	.000	.001	100.000						

Extraction Method: Principal Component Analysis.

**Table S3. Total Variance Explained of PCA for Figure 7B.**

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.924	49.619	49.619	9.924	49.619	49.619	9.813	49.065	49.065
2	8.145	40.725	90.343	8.145	40.725	90.343	8.184	40.921	89.985
3	1.252	6.260	96.604	1.252	6.260	96.604	1.324	6.618	96.604
4	.365	1.826	98.430						
5	.183	.914	99.344						
6	.058	.288	99.632						
7	.045	.223	99.855						
8	.029	.145	100.000						
9	3.455E-16	1.727E-15	100.000						
10	3.248E-16	1.624E-15	100.000						
11	2.725E-16	1.363E-15	100.000						
12	2.053E-16	1.026E-15	100.000						
13	1.144E-16	5.718E-16	100.000						
14	8.443E-17	4.222E-16	100.000						
15	-3.947E-17	-1.973E-16	100.000						
16	-9.499E-17	-4.750E-16	100.000						
17	-2.070E-16	-1.035E-15	100.000						
18	-3.262E-16	-1.631E-15	100.000						
19	-4.144E-16	-2.072E-15	100.000						
20	-4.729E-16	-2.364E-15	100.000						

Extraction Method: Principal Component Analysis.