

Supplementary materials

to the manuscript of “Protective Effect of Uridine on Structural and Functional Rearrangements in Heart Mitochondria after a High-Dose Isoprenaline Exposure Modelling Stress-Induced Cardiomyopathy in Rats”

Table S1. Indices of the succinate-fueled respiration and oxidative phosphorylation of rat heart mitochondria in four experimental groups

Group	V respiration, nmol O ₂ * min ⁻¹ * mg ⁻¹ protein				RCR	ADP/O	T _{ph} , s
	State 2	State 3	State 4	State 3U _{DNP}			
CTR	28.4±4.9	136.3±7.8	43.5±4.2	137.0±10.8	3.13±0.18	1.99±0.09	22.8±3.7
CTR+U	24.9±1.7	112.9±7.2	37.0±1.3	114.5±13.3	3.06±0.19	1.98±0.07	26.6±3.9
ISO	20.9±3.6	84.2±6.4*	28.4±2.3*	85.4±6.2*	2.91±0.11	1.87±0.08	39.4±2.9*
ISO+U	21.6±3.9	87.7±7.5*	27.2±1.7*	93.3±5.6*	3.12±0.13	1.92±0.09	33.3±3.1

Medium composition: 130 mM KCl, 5 mM NaH₂PO₄, 10 μM EGTA, and 10 mM HEPES-KOH, pH 7.4. Respiration of mitochondria was fueled by 5.0 mM potassium succinate (in the presence of 1 μM rotenone). Mitochondrial respiration in State 3 was initiated by 200 μM ADP. Mitochondrial respiration in state 3U_{DNP} was initiated by 50 μM 2,4-dinitrophenol. The results are presented as means ± SEM (*n* = 8-10). **p* < 0.05 compared to the control group (CTR); **p* < 0.05 compared to the ISO group.

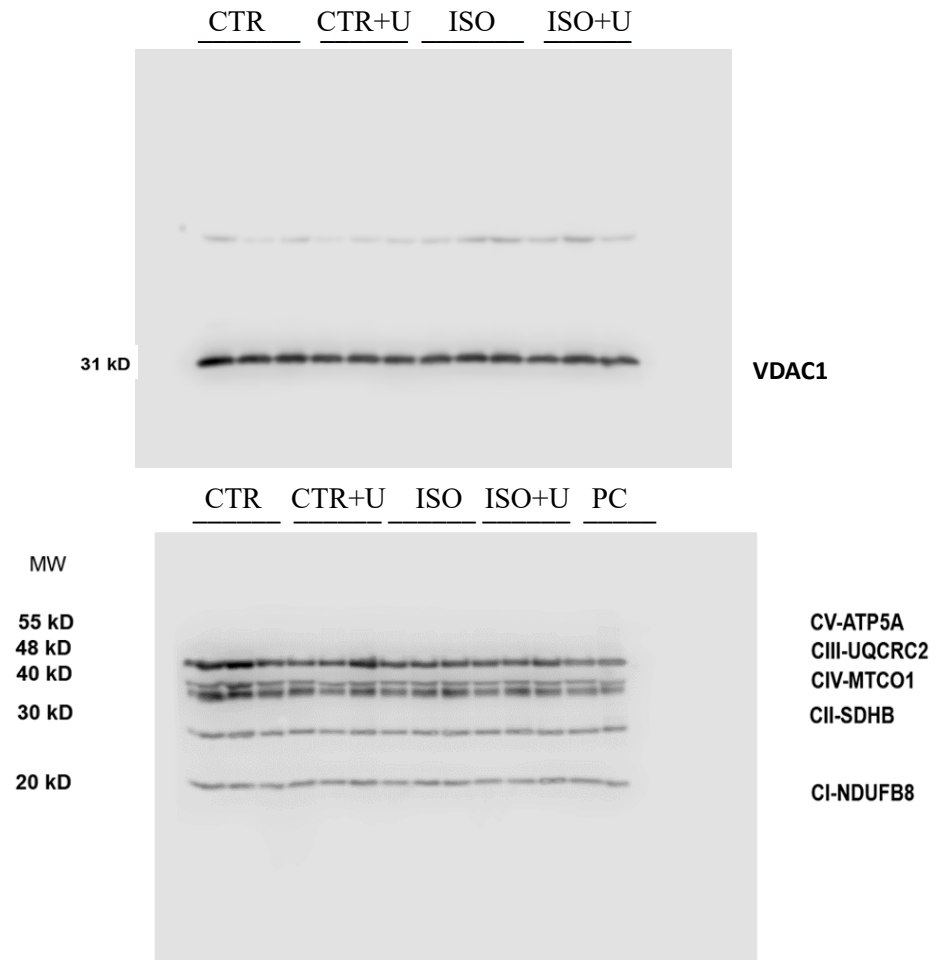


Figure S1. Representative Western blot of typical subunits of complexes I-V of the respiratory chain (CI-NDUFB8, CII-SDHB, CIII-UQCRC2, CIV-MTCO1 and CV-ATP5A) in the mitochondria isolated from the heart of experimental rats. Rat heart mitochondria were applied in an amount of 10 μ g of protein per band. The analysis was carried out using the Total OXPHOS Rodent WB Antibody Cocktail (Abcam, #ab110413) and the polyclonal anti-VDAC1 antibodies (Abcam, #ab15895). Analysis of the content of the OXPHOS subunits in the heart mitochondria of rats from four experimental groups (three independent experiments). PC - positive control (Abcam, #ab110341) (10 μ g of protein in each of the last two bands).