

Table 2. Correlation matrix showing the Pearson correlation coefficient (*r*) and the related *P* value

	Range	Mitochondrial content			Total cristae area			GMS ₃			PGMSOct ₃		
		<i>r</i>	<i>P</i>	<i>R_c</i>	<i>r</i>	<i>P</i>	<i>R_c</i>	<i>r</i>	<i>P</i>	<i>R_c</i>	<i>r</i>	<i>P</i>	<i>R_c</i>
Mitochondrial fractional area (μm ² μm ⁻²)	0.04–0.15				0.93	<0.001	0.91	0.81	0.001	0.58	0.65	0.03	0.56
Total cristae surface area (m ² cm ⁻²)	1.3–6.1							0.75	0.003	0.49	0.66	0.03	0.50
GMS ₃ (pmol s ⁻¹ mg ⁻¹)	51–115										0.58	0.03	0.42
PGMSOct ₃ (pmol s ⁻¹ mg ⁻¹)	46–93												
Cardiolipin (μg (mg dw) ⁻¹)	1.8–7.1	0.86	<0.001	0.85	0.73	0.005	0.67	0.70	0.003	0.58	0.50	0.07	
CS (μmol g ⁻¹ min ⁻¹)	76–233	0.84	<0.001	0.80	0.72	0.005	0.64	0.66	0.006	0.58	0.52	0.055	
Complex I activity (U (g ww) ⁻¹)	5.6–18.2	0.78	0.002	0.77	0.76	0.003	0.71	0.52	0.048	0.41	0.34	0.25	
Complex II protein content (AU)	0.59–2.60	0.73	0.005	0.72	0.72	0.006	0.71	0.48	0.06		0.55	0.04	0.49
Complex IV activity (U (g ww) ⁻¹)	48–176	0.79	0.001	0.71	0.75	0.003	0.64	0.69	0.004	0.64	0.34	0.25	
Complex V protein content (AU)	0.40–2.24	0.74	0.004	0.69	0.75	0.003	0.70	0.65	0.006	0.54	0.59	0.03	0.48
Complex II activity (U (g ww) ⁻¹)	4.8–17.2	0.73	0.004	0.67	0.63	0.02	0.54	0.68	0.005	0.63	0.33	0.27	
Complex III activity (U (g ww) ⁻¹)	16–70	0.70	0.01	0.60	0.62	0.02	0.52	0.64	0.01	0.59	0.39	0.19	
SCR act. (U (g ww) ⁻¹)	6.8–25.9	0.69	0.01	0.60	0.59	0.03	0.56	0.55	0.03	0.43	0.30	0.31	
Complex III protein content (AU)	0.07–2.07	0.61	0.03	0.47	0.59	0.03	0.48	0.56	0.02	0.39	0.44	0.11	
Complex IV protein content (AU)	0.09–1.63	0.55	0.05	0.44	0.62	0.03	0.50	0.53	0.03	0.40	0.38	0.18	
mtDNA (copies (mg ww) ⁻¹)	8.32 × 10 ⁷ –34.6 × 10 ⁷	0.35	0.23		0.31	0.30		0.46	0.07		0.50	0.07	
Complex I protein content (AU)	0.1–1.24	0.19	0.54		0.30	0.32		0.22	0.42		0.27	0.36	

If the association was significantly correlated (*P* < 0.05) the Lin's concordance coefficient (*R_c*) is also shown. Correlations are between total mitochondrial volume, total cristae area, ADP-stimulated fibre respiration using glutamate + malate + succinate as substrate (GMS₃) or ADP-stimulated fibre respiration using pyruvate + glutamate + malate + succinate + octanoyl-L-carnitine (PGMSOct₃), and the potential biomarkers of mitochondrial volume. The Lin's scale is defined as follows: 0.21–0.40 shows a fair concordance, 0.41–0.60 a moderate concordance, 0.61–0.80 a substantial concordance and 0.81–1.00 an almost perfect concordance. AU, arbitrary units; ww, wet weight; dw, dry weight; SCR act., succinate-cytochrome c reductase activity.