

Table VI. Structural and Functional Characteristics of the Average Isolated Mitochondrion

Parameter	Estimate
Diameter (μm)	0.76
Volume (μm^3)	0.27
Outer membrane area (μm^2)	1.93
Inner membrane area (μm^2)	6.47
Protein content (g)	1.1×10^{-13}
Number of molecules of	
complex I	2,679
complex II	5,538
bc_1 -complex	5,474
cytochrome <i>c</i>	16,577
aa_3 -complex	15,656
$F_1 \cdot F_0$ -ATPase	15,656
Maximal O_2 -consumption with succinate as substrate (<i>mol/min</i>)	20.2×10^{-18}
ATP-production with succinate as substrate (<i>mol/min</i>)	42.3×10^{-18}

Calculated from Tables II–IV based on 8.7×10^9 mitochondria per mg of protein. ATP-production is determined from the state 3 O_2 -consumption and a P/O ratio of 1.6.