

S1 Table. Enzymes involved in coenzyme Q pool redox reactions identified in the *Acropora digitifera* genome^a, the *Acropora millepora* transcriptome^b and the EST sequences deposited at GenBank^c.

| annotation | acronym | EC number | GO ID | <i>A. digitifera</i> protein ID | e-value | <i>A. millepora</i> genebank acc. |
|--|----------|--------------|------------|---|-------------------------|---|
| CoQ reducing enzymes | | | | | | |
| glycerol-3-phosphate dehydrogenase | GPDH | EC 1.1.5.3 | GO:0052590 | aug_v2a.03411 aug_v2a.21935 aug_v2a.03412 | 3E-97 3E-76 2E-39 | GO000270 JR989701 |
| electron-transferring flavoprotein dehydrogenase | ETFDH | EC 1.5.5.1 | GO:0004174 | aug_v2a.07429 aug_v2a.17786 | 0E+00 0E+00 | GO004340 GO000415 JR978217 JR974781 JR984902 JR977609 |
| dihydroorotate dehydrogenase | DHODH | EC 1.3.5.2 | GO:0004152 | aug_v2a.06198 | 4E-146 | DY580717 JR981972 JT005565 |
| NADH-cytochrome b ₅ reductase | pNDH | EC 1.6.2.2 | GO:0004128 | aug_v2a.00893 aug_v2a.12166 aug_v2a.07042 | 9E-62 9E-61 7E-63 | JT000401 JR980401 JR998872 |
| alternative NAD(P)H dehydrogenase | NDH | EC 1.6.99.3 | GO:0003954 | aug_v2a.16501 | 1E-119 | JR986898 JR984254 |
| CoQ oxidising enzymes | | | | | | |
| alternative oxidase 1, mitochondrial | AOX | EC 1.10.3.11 | GO:0009916 | aug_v2a.07092 | 2E-28 | DY587694 JR988887 JT002555 JR978016 |
| plasma membrane external oxidase | Ecto-NOX | - | - | aug_v2a.03517 | 5E-44 | JT014973 |

Homologue proteins and gene sequences were identified using BLAST searches (<http://ncbi.nlm.nih.gov>; <http://marinegenomics.oist.jp>) and the *A. digitifera* annotation available at Zoophyte (<http://bioserv7.bioinfo.pbf.hr/Zoophyte/index.jsp>). E-values are for the top annotated BLAST hit to the SwissProt database. Not listed are the subunits of the main enzyme complexes in the respiratory chain (complexes I-II-II).

^aShinzato C, Shoguchi E, Kawashima T, Hamada M, Hisata K, et al. (2011) Using the *Acropora digitifera* genome to understand coral responses to environmental change. *Nature* 476: 320-323.

^bMoya A, Huisman L, Ball EE, Hayward DC, Grasso LC, et al. (2012) Whole transcriptome analysis of the coral *Acropora millepora* reveals complex responses to CO₂-driven acidification during the initiation of calcification. *Mol Ecol* 21: 2440-2454.

^cBenson DA, Karsch-Mizrachi I, Lipman DJ, Ostell J and Wheeler DL (2005) GenBank. *Nucleic Acids Res* 33: D34-D38.