Mitochondrial Genome Sequence of the Glass Sponge _Oopsacas minuta_

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We report the complete mitochondrial genome sequence of the Mediterranean glass sponge _Oopsacas minuta_. This 19-kb mitochondrial genome has 24 noncoding genes (22 tRNAs and 2 rRNAs) and 14 protein-encoding genes coding for 11 subunits of respiratory chain complexes and 3 ATP synthase subunits.

**Sponges** (Porifera phylum) comprise a sister group of “true” animals (Eumetazoa) divided in four major classes and representing a key group to retrace the early evolution of animals. The phylogeny positions of sponges are still unclear, and mitochondrial protein-coding genes may be of help in resolving standing evolutionary issues, as well as in population/ecological studies. Inpoporifera, mitochondrial respiratory genes common to most animal mtDNA are mostly present (score, 1,197), and _Sympagella nux_ (score, 8,587), another glass sponge of the order Sympagellida, formed with the mitochondrial genome annotation (MITOS) server (9) and the ARWEN program (10). Annotations of genes were checked using homology searches on GenBank and eventually improved using Artemis (11). A single DNA strand carried genes with a total of 22 tRNA genes, 2 rRNA genes (one large and one small rRNA subunit), and 14 protein-coding genes. Non-protein-coding genes and coding sequences represented 20% and 62.5% of the genome, respectively. This genome has 13 of the respiratory genes common to most animal mtDNA (atp6, atp8, cob, cox1, cox2, cox3, nad1, nad2, nad3, nad4, nad4l, nad5, and nad6) and the atp9 gene found in nearly all sponge mtDNA. No trnW gene was identified, suggesting a lineage-specific gene loss in the mtDNA sequence of _Oopsacas minuta_.

**Nucleotide sequence accession numbers.** The mtDNA sequence of _Oopsacas minuta_ is available at DDBJ/EMBL/GenBank under the accession number KR709158. The version described in this paper is the first version, KR709158.1.

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