# Additional File 2. Mitochondrial features of *A. adeninivorans*

**Figure S2A Circular map of *A. adeninivorans* mitDNA**.

Gene annotation relied on similarity searches with different mitochondrial sequences of hemiascomycetous yeasts, using the mold mitochondrial genetic code for protein-coding genes (UGA for Trp). Genes encoding tRNA-molecules were predicted using tRNAscan-SE [1]. Protein coding genes are indicated by light blue arrows, intronic ORFs by dark green arrows, introns by light grey boxes, rDNA by dark blue arrows, tRNAs by light green arrows with charged amino acid indicated in one letter code. Putative terminators are depicted by purple bars.

**Table S2B Codon usage in mitochondrial CDS.**

For each amino acid (Aa) encoded by a given codon (Codon), the number of occurrences of this codons is shown (Nb) as well as the cognate tRNA designated by its anticodon (AC).

**Figure S2C Intron structure.**

Proposed structure of the two group 1D introns present in *cob*; loops encoding the intronic ORFs are omitted.

Figure S2A

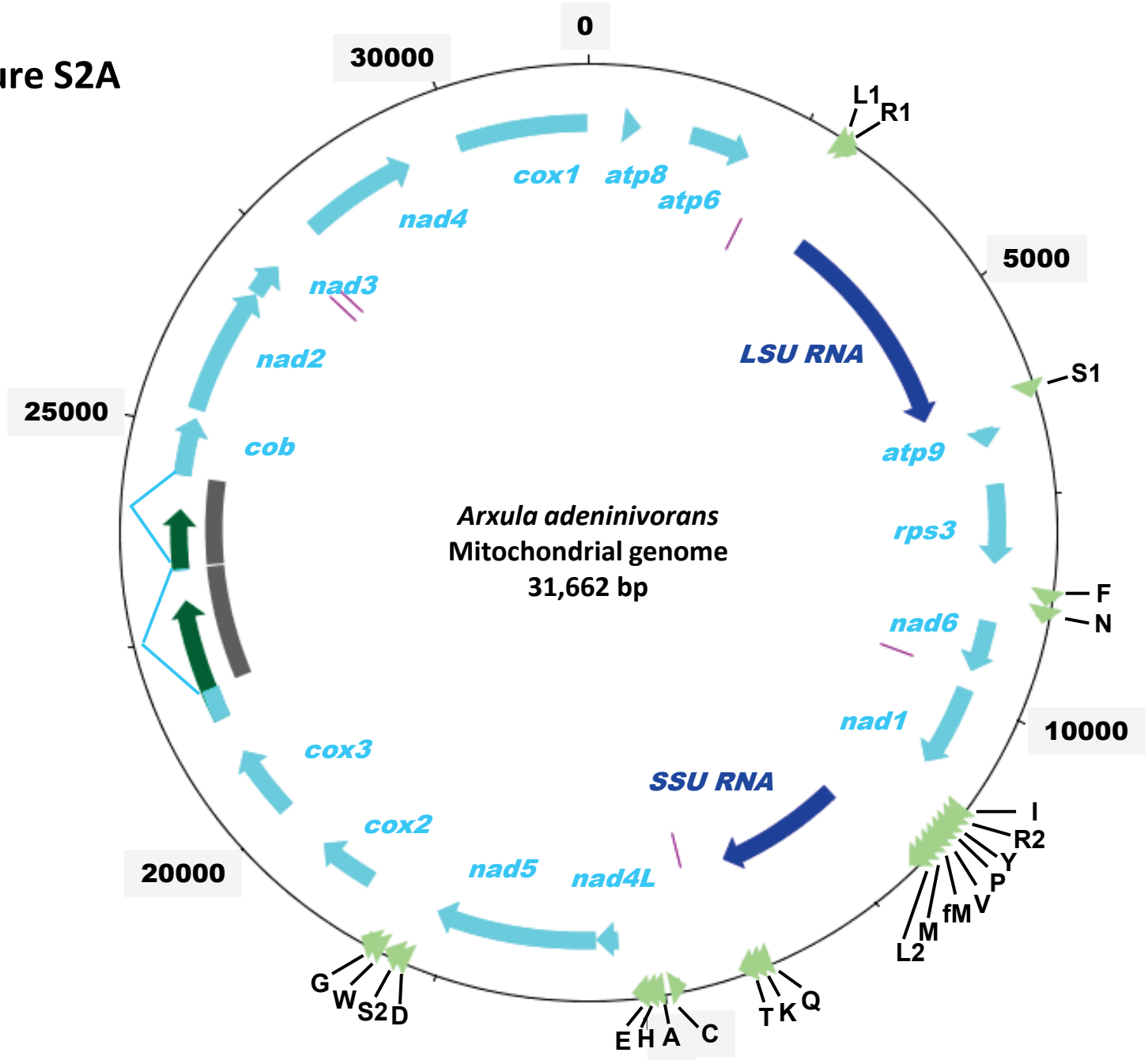

0
5000
10000
20000
25000
30000
L1
R1
S1
F
N
I
R2
Y
P
V
fM
M
L2
Q
K
T
C
A
H
E
D
S2
W
G
cox1
atp8
atp6
atp9
rps3
nad6
nad1
nad4L
nad5
cox2
cox3
cob
nad2
nad3
nad4
LSU RNA
SSU RNA
Arxula adeninivorans
Mitochondrial genome
31,662 bp

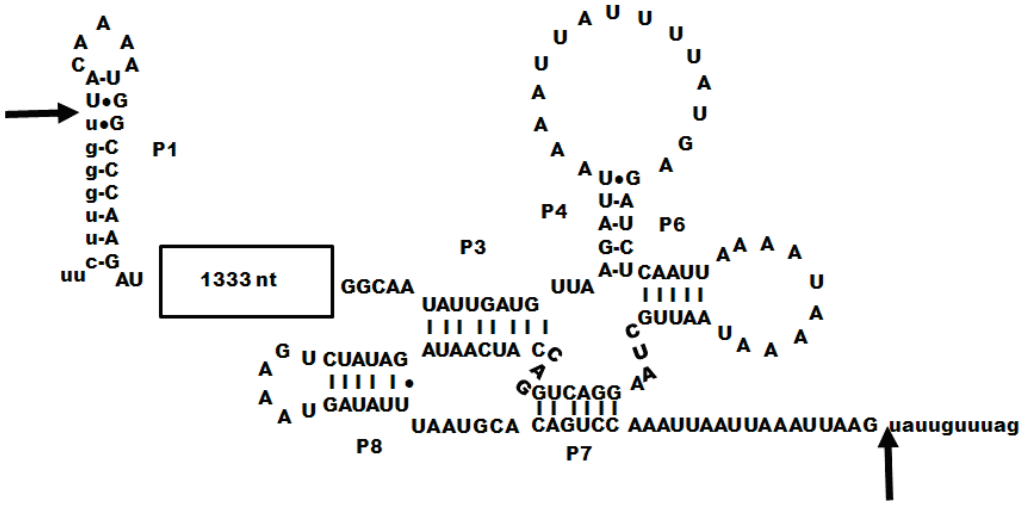
**Table S2B Codon usage in mitochondrial CDS**

For each amino acid (Aa) encoded by a given codon (Codon), the number of occurence of this codons is shown (Nb) as well as the cognate tRNA designated by its anticodon (AC).

| Aa | Nb | Codon | AC | Aa | Nb | Codon | AC | Aa | Nb | Codon | AC | Aa | Nb | Codon | AC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phe | 226 | ttt | --- | Ser | 64 | tct | --- | Tyr | 393 | tat | --- | Cys | 47 | tgt | --- |
| Phe | 98 | ttc | gaa | Ser | 0 | tcc | --- | Tyr | 9 | tac | gta | Cys | 0 | tgc | gca |
| Leu | 751 | tta | taa | Ser | 161 | tca | tga | - | 15 | taa | | Trp | 82 | tga | tca |
| Leu | 4 | ttg | --- | Ser | 0 | tcg | --- | - | 0 | tag | | Trp | 0 | tgg | --- |
| Leu | 6 | ctt | --- | Pro | 77 | cct | --- | His | 104 | cat | --- | Arg | 39 | cgt | acg |
| Leu | 0 | ctc | --- | Pro | 2 | ccc | --- | His | 2 | cac | gtg | Arg | 0 | cgc | --- |
| Leu | 6 | cta | tag | Pro | 86 | cca | tgg | Gln | 86 | caa | ttg | Arg | 0 | cga | --- |
| Leu | 1 | ctg | --- | Pro | 0 | ccg | --- | Gln | 0 | cag | --- | Arg | 0 | cgg | --- |
| Ile | 208 | att | --- | Thr | 119 | act | --- | Asn | 430 | aat | --- | Ser | 194 | agt | --- |
| Ile | 11 | atc | gat | Thr | 0 | acc | --- | Asn | 10 | aac | gtt | Ser | 0 | agc | gct |
| Ile | 573 | ata | --- | Thr | 174 | aca | tgt | Lys | 190 | aaa | ttt | Arg | 85 | aga | tct |
| Met | 124 | atg | cat | Thr | 0 | acg | --- | Lys | 6 | aag | --- | Arg | 2 | agg | --- |
| iMet | 14 | atg | cat | | | | | | | | | | | | |
| Val | 124 | gtt | --- | Ala | 164 | gct | --- | Asp | 128 | gat | --- | Gly | 214 | ggt | --- |
| Val | 0 | gtc | --- | Ala | 3 | gcc | --- | Asp | 1 | gac | gtc | Gly | 2 | ggc | --- |
| Val | 180 | gta | tac | Ala | 85 | gca | tgc | Glu | 126 | gaa | ttc | Gly | 101 | gga | tcc |
| Val | 1 | gtg | --- | Ala | 1 | gcg | --- | Glu | 7 | gag | --- | Gly | 5 | ggg | --- |

# Figure S2C

## cob-i1




## cob-i2