

Table S2. Genes in 12 angiosperm mt genomes.

	Beta	Brassica	Arabidopsis	Nicotiana	Vitis	Phoenix	Bambusa	Triticum	Oryza	Sorghum	Tripsacum	Zea
Respiratory chain complex I												
<i>nad1</i>	+	+	+	+	+	+	+	-	+	+	+	+
<i>nad2</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>nad3</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>nad4</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>nad4L</i>	+	+	+	+	+	+	+	-	+	+	+	+
<i>nad5</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>nad6</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>nad7</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>nad9</i>	+	+	+	+	+	+	+	+	+	+	+	+
Respiratory chain complex II												
<i>sdh3</i>	-	-	-	+	+	-	-	-	-	-	-	-
<i>sdh4</i>	-	-	-	+	+	-	-	-	-	-	-	-
Respiratory chain complex III												
<i>cob</i>	+	+	+	+	+	+	+	+	+	+	+	+
Respiratory chain complex IV												
<i>coxl</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>cox2</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>cox3</i>	+	+	+	+	+	+	+	+	+	+	+	+
Respiratory chain complex V												
<i>atp1</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>atp4</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>atp6</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>atp8</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>atp9</i>	+	+	+	+	+	+	+	+	+	+	+	+
Cytochrome c biogenesis												
<i>ccmB</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>ccmC</i>	-	+	+	+	+	+	+	+	+	+	+	+
<i>ccmFC</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>ccmFN</i>	+	+	+	+	+	+	+	+	+	+	+	+
Ribosomal proteins												
<i>rpl2</i>	-	+	+	+	+	+	-	-	+	-	-	-
<i>rpl5</i>	+	+	+	+	+	+	+	+	+	-	-	-
<i>rpl16</i>	-	+	+	+	+	+	+	+	+	+	+	+
<i>rps1</i>	-	-	-	+	+	+	+	+	+	+	+	+
<i>rps2</i>	-	-	-	-	-	+	-	-	+	+	+	+
<i>rps3</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>rps4</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>rps7</i>	+	+	+	-	+	+	+	+	+	+	+	+
<i>rps10</i>	-	-	-	+	+	-	-	-	-	-	-	-
<i>rps11</i>	-	-	-	-	-	+	-	-	-	-	-	-
<i>rps12</i>	+	+	+	+	+	+	+	+	+	+	+	+
<i>rps13</i>	+	-	-	+	+	+	+	+	+	+	+	+
<i>rps14</i>	-	+	-	-	+	+	-	-	-	-	-	-
<i>rps19</i>	-	-	-	+	+	+	-	-	+	-	-	-

Other proteins

<i>RNA_pol</i>	-	-	-	-	+	+	-	-	-	-	-	-	-
<i>tatC</i>	+	+	+	+	-	-	+	+	+	+	+	+	+
<i>mttB</i>	+	+	+	+	-	+	+	+	+	+	+	+	+
<i>matr</i>	+	+	+	+	+	+	+	+	+	+	+	+	+

The genus names are used to represent the sequenced mitochondrial genomes.

Presence (+) and absence (-) of proteins are from references [6,8,9,12,13,14,15].