

**Supplemental Table S1. The primer sequences used in this study.**

**The primer sequences used for qRT-PCR assays in mitochondrial gene expression**

|                | Forward sequence (5'-3') | Reverse sequence (5'-3') |
|----------------|--------------------------|--------------------------|
| <i>cox1</i>    | aacgacgaatcccaactacg     | ttcccatgcatttcttaggg     |
| <i>cox2</i>    | ctggatcatcttctggaatcg    | ttcccatgcatttcttaggg     |
| <i>cox3</i>    | gcaactggctttcatggttt     | cgtgatgcttcttggtcaga     |
| <i>cob</i>     | gttgacatccgatccaacct     | ccgcaatagcaccagttttt     |
| <i>rps1</i>    | ccgcttctcttccacaaag      | atgaaacctgcgatggctac     |
| <i>rps2A</i>   | ttgggtcatccccagagtag     | aaggctctcattgacgcact     |
| <i>rps2B</i>   | cagaacacctcgttcccatt     | gttggccactacaggagaa      |
| <i>rps3</i>    | gagacgaaagccaaagggtga    | ttcagatccaagtcggttca     |
| <i>rps4</i>    | aggggatgccgcttactact     | cagcgaaggaaactgcctaag    |
| <i>rps7</i>    | tacatcgcggttcagttcgag    | tcgcatgatcgatggtaaaa     |
| <i>rps13</i>   | gagttcgttgaccgcgtaat     | gggaattgaagaggggagaa     |
| <i>rpl16</i>   | ttcgcgaccctactacatc      | tgacgggaatttcaggtgtca    |
| <i>ccmB</i>    | gtcgtcacgcccttaatatgat   | gaaaagggttcgggaggaaag    |
| <i>ccmC</i>    | aaggagattcgggaaaaga      | atgttctatgccattcca       |
| <i>ccmFC</i>   | cacatggaggagtgtgcatc     | caaaggcaatcgttgagtga     |
| <i>ccmFN</i>   | catctggcacgagatgaaaa     | tcgaacaaaaggatcggaac     |
| <i>matr</i>    | ctttcgtttccctccttcc      | taccattgaattcggccttc     |
| <i>mttB</i>    | gggggaggagttaggaacagg    | ctatgggggaacaaaggcaga    |
| <i>atp1</i>    | cccggggatgttttctattt     | cgtctccagcttgtgttca      |
| <i>atp4</i>    | tttgtcatcaagtccgaag      | cccgtcgagagtttcttga      |
| <i>atp6</i>    | tccggaaatgtgaacacaa      | tcataccctggggattacga     |
| <i>atp8</i>    | ccgtcgactatttgggaaaa     | caacaagtgatccgactgga     |
| <i>atp9</i>    | gcgaaatccttcatttgcta     | atcagaaaggccatcattgg     |
| <i>orf77</i>   | ttcgttttcgatgcataaa      | cagtgaagaagcccgttaa      |
| <i>orf355</i>  | ttacgaggctgatgcaagtg     | tgtggcctcgattagtacc      |
| <i>orf134b</i> | tcaaggacatccggataagg     | tcaagccatcgactgaacac     |
| <i>orf147b</i> | agcctcccaatggttatgt      | atgaaaggctggagcaacac     |
| <i>orf189</i>  | ccgatgaaagggtcgtagaa     | gtattcgttcggctgcaact     |
| <i>orf191</i>  | cccagggtctcttctctatc     | atgaaaacgggcatatcgaa     |
| <i>orf424</i>  | cgagccctccccttatttag     | acggaaagcgcttatttct      |
| <i>nad1</i>    | aatacggggaacaagggaat     | tctgcagctcaaatggtctc     |
| <i>nad2</i>    | gccaagattttgaccggata     | gggtgggtgaaccctcataga    |
| <i>nad4</i>    | agggctgaagaaccagtc       | agcccatatgaatttggtga     |
| <i>nad4L</i>   | ttcggggaatcctcctaat      | tcatcaaagaaacggaaaa      |
| <i>nad5</i>    | cgtacacattccgacgattg     | cccacatacagaaaaaggta     |
| <i>nad6</i>    | tccgtctggttttggtttc      | ggcatttcgtcggatacat      |
| <i>nad7</i>    | aagaggtcctgggtatgct      | tgctgcattctctcgatacg     |
| <i>nad9</i>    | caagtgcggacgaagtaaca     | aaatccggatgattgatgga     |
| <i>18S</i>     | cagctcgtgtcgtgagatgt     | ttctccttaggcgcattgtct    |

**The primer sequences used in *mtpt* and *platid* sequence amplification**

|                 | Forward sequence (5'-3') | Reverse sequence (5'-3') |
|-----------------|--------------------------|--------------------------|
| Mt-Fragment 1   | agacccggatacctccctta     | aggggaacggaaccgtatag     |
| Mt-Fragment 2   | aagaagagccgaagccctac     | gtcagggaatttctcccatt     |
| Mt-Fragment 3-1 | ttgctattggacggctttct     | cggttctgtggagtgtttt      |
| Mt-Fragment 3-2 | ctttggattgtcttcaattgga   | tagatctgcgcctgccttta     |
| Mt-Fragment 3-3 | tttctccacgtcgatagg       | tccacatgtcgagattgcat     |
| Mt-Fragment 4   | ctatttatccggccagtgga     | tgttacggcctaaatgctga     |
| Mt-Fragment 5   | tgcatttttgcaattcattgat   | cgcaattcaaaaacggaaat     |
| Mt-Fragment 6   | gattgtggtatccccacctc     | tcacaacggatccgaactt      |
| Mt-Fragment 7   | atcaccatcactccctctgc     | ctactggcaccggcactatt     |
| Mt-Fragment 8   | cctaaaggaaagccggaat      | agagcagtcgattcgggtcat    |

|                  |                        |                        |
|------------------|------------------------|------------------------|
| Mt-Fragment 9-1  | atcaccttacgcagccaaac   | aggccctgaaaggagaagag   |
| Mt-Fragment 9-2  | cgatttgtcaaagggattgg   | atggagtcgagatccattgc   |
| Mt-Fragment 10-1 | cgtattgaatgcgcaaagtg   | aatgggaaatgccctacctt   |
| Mt-Fragment 10-2 | cacttgctgccgttactcaa   | aaggggaacgcgaaataact   |
| Mt-Fragment 11   | ccaaagatttcggtcagagc   | tcttcattaggcaggcaggt   |
| Pt-Fragment 1    | ttcatcgaatacggctttcc   | ggagcaggctaccatgagac   |
| Pt-Fragment 2    | tgtgcttgtgaaactctcg    | aaatgttcgccaaattgcat   |
| Pt-Fragment 3-1  | cgcaaaatggagaaaatcgt   | gcacttgaatatgccgaagc   |
| Pt-Fragment 3-2  | tggattgtcttcatcaattgga | cctatcgacgtggaggaaaa   |
| Pt-Fragment 3-3  | ccaaacagtcgcgattttcc   | caaatacgttaccacaatgga  |
| Pt-Fragment 4    | gaagggcaatcactcgttct   | cccctgttattttgggtca    |
| Pt-Fragment 5    | ggcaagctcgtacacaatga   | attgatcacaagccgaaaca   |
| Pt-Fragment 6    | cacaaaggagtgcgacaaga   | aagggcacctaattctcacctc |
| Pt-Fragment 7    | ccactctggaagagctcagg   | taaaggtccttccccctttg   |
| Pt-Fragment 8    | tccaaagcatacggctttct   | ggttcaattcctgctggatg   |
| Pt-Fragment 9-1  | tgaaaaagtgggtcgttct    | tcggatcgggtgaattagag   |
| Pt-Fragment 9-2  | aggccctgaaaggagaagag   | tcaatgaacccattcttgc    |
| Pt-Fragment 10   | tcggttggaaacttttctgc   | ataagccagatgacggaacg   |
| Pt-Fragment 11   | cctggggaccagatcaata    | gaataccagttgaagggtaatg |

#### The primer sequences used for determination of mitochondrial DNA level

|         | Forward sequence (5'-3')    | Reverse sequence (5'-3') |
|---------|-----------------------------|--------------------------|
| C33-C34 | ttatcgaatccatgggggacttgtca  | gacctatcgcgtggtaaagag    |
| C35-C36 | caactaaatgaaataataggaggggat | gggccattcttatgtcatgggct  |
| C39-C40 | cagcactgagttgagtagcgac      | catccccacatgcgattgc      |

#### The primer sequences used for Circular RT-PCR assays

|                                | Sequence (5'-3')       |
|--------------------------------|------------------------|
| nad1-reverse transcript primer | gccaagcgaccagac        |
| nad1-exon1-F1                  | caagcgagcgtacctttgtt   |
| nad1-exon1-F2                  | ggaaacagcaactaactatgg  |
| nad1-exon1-R1                  | accggtggagaggctattct   |
| nad1-exon1-R2                  | tttcgcctgccttc         |
| nad2-reverse transcript primer | tccagcattacggcaa       |
| nad2-exon4-5-F1                | tgaaaacgctcctaaccct    |
| nad2-exon4-5-F2                | actactagcaatgacttctctt |
| nad2-exon4-5-R1                | ttactttcgtttgggcatgg   |
| nad2-exon4-5-R2                | ggtgggtgaaccctcataga   |
| nad2-exon3-4-5-F1              | tgaaaacgctcctaaccct    |
| nad2-exon3-4-5-F2              | actactagcaatgacttctctt |
| nad2-exon3-4-5-R1              | accacccatcctaccctact   |
| nad2-exon3-4-5-R2              | gtggtggttgggcctac      |