

1 TACCTAAAAA ATCCCAAACA TATAACTGAA CTCCTCACAC CCAATTGGAC (8F)
51 **CAATCTATCA CCCTATAGAA** GAACTAATGT TAGTATAAGT AACATGAAAA
101 CATTCTCCTC CGCATAAGCC TGCCTCAGAT CAAAACACTG AACTGACAAT
151 TAACAGCCCA **ATATCTACAA TCAACCAACA** AGTCATTATT ACCCTCACTG (7F)
201 TCAACCCAAC ACAGGCATGC TCATAAGGAA AGGTTAAAAA AAGTAAAAGG
251 **AACTCGGCAA ACCTTACCCC** GCCTGTTTAC CAAAAACATC ACCTCTAGCA (6F/12R)
301 TCACCAGTAT TAGAGGCACC GCCTGCCCAG TGACACATGT TTAACGGCCG
351 CGGTACCCTA **ACCGTGCAAA GGTAGCATAA TCACTTGTTC** CTTAAATAGG (2F)
401 GACCTGTATG AATGGCTCCA CGAGGGTTCA GCTGTCTCTT ACTTTTAACC
451 AGTGAAATTG ACCTGCCCGT GAAGAGGCGG GCATGACACA GCAAGACGAG
501 AAGACCCTAT GGAGCTTTAA TTTATTAATG **CAAACAGTAC CTAACaaacc** (14R)
551 *ctgttccttg* *gtgggtgtgg* *gtataatact* ***aagttgagat*** ***gatatcattt*** (4R)
601 ***acgggggaag*** *gcgctttgtg* *aagtaggcct* *tatttctctt* *gtcctttcgt*
651 *acagggagga* *atltgaaggt* *agatagaaac* *cgacctggat* *tactccggtc*
701 *tgaactcaga* *tcacgtagga* *ctttaatcgt* *tgaacaaacg* ***aacctttaat*** (17R)
751 ***agcggctgca*** *ccatcgggat* *gtcctgatcc* *aacatcgagg* *tcgtaaacc*
801 *tattgttgat* *atggactcta* *gaataggatt* *gcgctgttat* *ccctagggta*
851 *acttgttccg* *ttggtcaagt* *tattggatca* *attgagtata* *gtagttcgct*
901 *ttgactgggtg* *aagtcttagc* *atgtactgct* *cggaggttgg* *gttctgctcc*
951 *gaggtcgccc* *caaccgaaat* *ttttaatgca* *ggtttggtag* *tttaggacct*
1001 *gtgggtttgt* *taggtactgt* *ttgcattaat* *aaattaaagc* *tccatagggt*
1051 *cttctcgtct* *tgctgtgtca* *tgcccgcctc* *ttcacgggca* *ggtcaatttc*
1101 *actggttaaa* *agtaagagac* *agctgaacc* *tcgtggagcc* *attcatacag*
1151 *gtccctattt* *aaggaacaag* *tgattatgct* *acctttgcac* *ggttagggta*
1201 *ccgcggccgt* *taaacatgtg* *tactgggca* *ggcgggtgct* *ctaatactgg*
1251 *tgatgctaga* *ggtgatgttt* *ttggtaaaca* *ggcggggtaa* *ggtttgccga*
1301 *gttcctttta* *ctttttttaa* *cctttcctta* *tgagcatgcc* *tgtgttggtg*
1351 *tgacagtgag* *ggtaataatg* *acttgttggt* *tgattgtaga* *tattgggctg*
1401 *ttaattgtca* *gttcagtgtt* *ttgatctgac* *gcaggcttat* *gcggaggaga*
1451 *atgttttcat* *gttacttata* *ctaacattag* *ttcttctata* *gggtgataga*
1501 *ttggtccaat* *tgggtgtgag* *gagttcagtt* *atatgtttgg* *gatttttttag*
1551 *gtagtgggtg* *ttgagcttga* *acgctttctt* *aattgggtggc* *tgcttttagg*
1601 *cctactatgg* *gtgttaaatt* *ttttactctc* *tctacaaggt* *tttttcctag*
1651 *tgtccaaga* *gctgttcctc* *tttgactaa* *cagttaaatt* *tacaagggga*
1701 *tttagagggt* *tctgtgggca* *aatttaaagt* *tgaactaaga* *ttctatcttg*
1751 *gacaaccagc* *taccaccagg* *ctcggtaggt* *ttgtcgctc* *tacctataaa*
1801 *tcttcccact* *atlttgctac* *atagacgggt* *gtgctctttt* *agctgttctt*
1851 *aggtagctcg* *tctggtttcg* ***ggggtcttag*** ***ctttggctct*** ***ccttgcaaag*** (16F)
1901 *ttatttctag* *ttaattcatt* *atgcagaagg* *tataggggtt* *agtccttgct*
1951 *atattatgct* *tggttataat* *ttttcatctt* *tcccttgccg* *tactatatct*
2001 *attgcgccag* *gtttcaattt* *ctatcgcta* *tactttatlt* *gggtaaattg*
2051 *tttggtctaag* *gttgtctggt* *agtaagggtg* ***agtggtttg*** ***gggctaggtt*** (10R)
2101 **tagc**

Dataset S2. Sequence of the ASncmtRNA-2. The sequence of the human ASncmtRNA-2 revealed an IR of 545 nt (uppercase) linked to the 5' of the antisense 16S mitochondrial RNA (lowercase). The sequence of 44 nt at the 5' end (underlined) was determined by 5' RACE (see text). The sequences in bold correspond to the different primers utilized as shown in Fig. 2a. They are indicated at the right of the sequence. The sequence from position 552 to 1001 (italics) corresponds to the 450 nt of the loop (GenBank Access No EU863790).