

**Table S6. Oligonucleotides used to analyze the subcellular localization of tRNAs**

| Name | Type                          | Strand  | Sequence                 | Optimized PCR condition <sup>a</sup> |        |
|------|-------------------------------|---------|--------------------------|--------------------------------------|--------|
|      |                               |         |                          | Annealing                            | Cycles |
| P5   | snU6                          | Forward | GTTCTTCCGAGAACATATAC     | 55 °C                                | x 20   |
| P6   |                               | Reverse | AACGCTTCACGAATTTGC       |                                      |        |
| P7   | snoU3                         | Forward | ACTATACAGAATCATTCTGCAG   | 60 °C                                | x 30   |
| P8   |                               | Reverse | ACTGCTCAGAAGAGCAGG       |                                      |        |
| P9   | tRNA <sup>iMet</sup>          | Forward | AGCAGCGTGGCGCAGTGGAA     | 60 °C                                | x 25   |
| P10  |                               | Reverse | TAGCAGCGAGTGTTTTCGATCCA  |                                      |        |
| P11  | tRNA <sup>Gly</sup> (UCC)     | Forward | GCGTTCGTGGTGTAAATGGTCAGC | 60 °C                                | x 35   |
| P12  |                               | Reverse | TGCGTTCGGGGGAATCGAA      |                                      |        |
| P13  | tRNA <sup>Ile</sup> (UAU)     | Forward | GCCCCATTGGCGCAGTCGGTTAGC | 60 °C                                | x 30   |
| P14  |                               | Reverse | TGCCCCATGCCAGGCTCGAACTG  |                                      |        |
| P15  | nev-tRNA <sup>Gly</sup> (CCC) | Forward | GCGGTGGTGGCCGAGCGGTCA    | 60 °C                                | x 35   |
| P16  |                               | Reverse | CCCGCGCTCTGTACCAGAATAG   |                                      |        |
| P17  | nev-tRNA <sup>Ile</sup> (UAU) | Forward | GCCCCGGTGGCCGAGCGGTCTG   | 60 °C                                | x 30   |
| P18  |                               | Reverse | CCCGCGACTGGTTAAACCAATGA  |                                      |        |

<sup>a</sup> PCR reactions were performed using the indicated cycle numbers : denaturation for 10 s at 98 °C, annealing for 3 s at the indicated temperatures and extension for 6 s at 74 °C (See Materials and Methods for details).