

Supplementary Table S1. Oligonucleotide primers and PCR conditions used for the detection of *Bartonella* species or tick-borne pathogens in ticks collected from tick-bitten patients

| Identification | Target gene | Primer name | Nucleotide sequence (5'-3') | Product size (bp) | PCR conditions (°C/sec) | | | | Reference |
|----------------------------------|---------------|-------------|-----------------------------|-------------------|-------------------------|-----------|-----------|--------|-----------|
| | | | | | Denaturation | Annealing | Extension | Cycles | |
| <i>Anaplasma phagocytophilum</i> | <i>groEL</i> | GRO607F | GAAGATGCWGTWGGWTGTACKGC | 688 | 95/30 | 54/30 | 72/60 | 30 | [14] |
| | | GRO1294R | AGMGCTTCWCCTTCWACRTCCTC | | | | | | |
| | | GRO677F | ATTACTCAGAGTGTCTCTCARTG | 445 | 95/30 | 57/30 | 72/60 | 30 | |
| | <i>ankA</i> | GRO1121R | TGCATACCRTCAGTYTTTTCAAC | | | | | | [14] |
| | | ANK-F1 | GAAGAAATTACAACCTCCTGAAG | 705 | 95/30 | 53/30 | 72/60 | 35 | |
| | | ANK-R1 | CAGCCAGATGCAGTAACGTG | | | | | | |
| <i>Bartonella</i> species | <i>ITS</i> | ANK-F2 | TTGACCGCTGAAGCACTAAC | 664 | 95/30 | 52/30 | 72/60 | 5 | [8] |
| | | ANK-R2 | ACCATTTGCTTCTTGAGGAG | | | | | | |
| | | ITS_OF | TTCAGATGATGATCCCAAGC | | | | | | |
| | | ITS_OR | AACATGTCTGAATATATCTTC | 639 | 95/30 | 48/30 | 72/60 | 5 | |
| | | ITS_IF | CCGGAGGGCTTGCTAGCTCAG | | | | | | |
| | | ITS_IR | CACAATTTCAATAGAAC | 499 | 95/30 | 50/30 | 72/60 | 30 | |
| <i>Coxiella burnetii</i> | <i>IS1111</i> | IS111F1 | TACTGGGTGTTGATATTGC | 485 | 95/15 | 52/5 | 72/30 | 35 | [15] |
| | | IS111R1 | CCGTTTCATCCGCGGTG | | | | | | |
| | | IS111F2 | GTAAAGTGATCTACACGA | 260 | 95/15 | 56/15 | 72/15 | 30 | |
| | | IS111R2 | TTAACAGCGCTTGAACGT | | | | | | |
| <i>Orientia tsutsugamushi</i> | <i>56 kDa</i> | 56BO-144F | YGYAGAATCTRCTCGCTTGG | 1250 | 94/60 | 60/60 | 72/60 | 35 | [14] |
| | | 56BO-1395R | AGCTAMCCCCTRCACCAABAC | | | | | | |
| | | 56BO-406F | CCWCCTCARCCTACTATRATGC | 680 | 94/30 | 61/30 | 72/45 | 30 | |
| <i>Rickettsia</i> species | <i>ompA</i> | 56BO-1088R | GCWGCTGCTRCTGCTTCTTG | | | | | | [16,17] |
| | | RR190.70F | ATGGCGAATATTTCTCCAAAAA | 634 | 94/30 | 50/30 | 72/60 | 40 | |
| | | RR190.701R | GTTCCGTTAATGGCAGCATCT | | | | | | |
| | | RR190.70F | ATGGCGAATATTTCTCCAAAAA | 535 | 94/30 | 50/30 | 72/30 | 5 | |
| Ticks | 16S rDNA | RR190.602R | AGTGCAGCATTGCTCCCCCT | | | | | | [13] |
| | | 16S+1-F | CTGCTCAATGAATATTTAAATTGC | 450 | 95/45 | 55/60 | 72/90 | 40 | |
| | | 16S+1-R | CGGTCTAAACTCAGATCATGTAGG | | | | | | |

groEL, heat shock protein gene; *ankA*, ankyrin-related protein gene; *ITS*, 16S-23S internal transcribed spacer region; *IS1111*, htpAB-associated repetitive element; *56 kDa*, 56 kDa TSA gene; *ompA*, outer membrane protein A gene; 16S rDNA, 16S ribosomal RNA gene.