**Supplemental Table 1: List of Oligonucleotide primers and TaqMan® Probes used in this study.**

**Species Target Sequence (5’ to 3’) Amplicon (bp) Reference**

*A. phagocytophilum* Msp2 F ATGGAAGGTAGTGTTGGTTATGGT 67 (Courtney et al., 2004)

*A. phagocytophilum* Msp2 R AGCGCTCGTAACCAATCTCAAG Custom TaqMan® Design Tool

*A. phagocytophilum* Msp2 Probe 6-FAM-TCAACCCTGGCACCACC—MGBNFQ

*A. phagocytophilum* 16S rRNA N1F (ge3a) CACATGCAAGTCGAACGGATTATTC 932 (Massung et al., 1998)

*A. phagocytophilum* 16S rRNA N1R (ge10r) TTCCGTTAAGAAGGATCTAATCTCC Custom TaqMan® Design Tool

*A. phagocytophilum* 16S rRNA N2F (ge9f) AACGGATTATTCTTTATAGCTTGCT 546

*A. phagocytophilum* 16S rRNA N2 R (ge2) GGCAGTATTAAAAGCAGCTCCAGG

*B. microti* 18S rRNA F (Bab8) CAGGGAGGTAGTGACAAGAAATAACA 73 (Teal et al., 2012)

*B. microti* 18S rRNA R GGTTTAGATTCCCATCATTCCAAT

*B. microti* 18S rRNA Probe 6FAM-TACAGGGCTTAAAGTCT-MGBNFQ

*B. microti* 18S rRNA (RLBH R) TCTTCGATCCCCTAACTTTC 498 (Gubbels et al., 1999)

*Babesia* spp. 18S rRNA F GCTCGTAGTTGAATTTCTGCGT 283 (*B. odo*.) PrimerBLAST

*Babesia* spp. 18S rRNA R TTGGCAAATGCTTTCGCAGT 311 (*B. microti*) GenBank: KC460321.1

*B. odocoilei* 5.8S rRNA F CCCTCCAATTGTGTTGCTGC 527 PrimerBLAST

*B. odocoilei* 5.8S rRNA R GAGAGCCTCGAGATCACACG GenBank: AY339750.1

*B. burgdorferi* 23s rRNA F GCGAGTCTTAAAAGGGCGATTT 74 (Courtney et al., 2004)

*B. burgdorferi* 23s rRNA R TTCAGCCTGGCCATAAATAGATCAC Custom TaqMan® Design Tool

*B. burgdorferi* 23s rRNA Probe 6-FAM-TCGGCTTCGGGTCTAC-MGBNFQ

*B. burgdorferi* Osp A F CTGGGGAAGTTTCAGTTGAAC 181 (Dibernardo et al., 2014)

*B. burgdorferi* Osp A R TTGGTGCCATTTGAGTCGTA Custom TaqMan® Design Tool

*B. burgdorferi* Osp A Probe 6-FAM-CAGCTTGGAATTCAGGCA-MGBNFQ

*Borrelia spp.* IGS F GTATGTTTAGTGAGGGGGGTG 1028 *(B. burg)* (Bunikis et al., 2004)

*Borrelia spp*. IGS R GGATCATAGCTCAGGTGGTTAG 567 (*B. miya*)

*Borrelia spp*  IGS F nested AGGGGGGTGAAGTCGTAACAAG 987 *(B. burg)*

*Borrelia spp* IGS R nested GTCTGATAAACCTGAGGTCGGA 526 (*B. miya*)

*B. miyamotoi* Fla F TTGCTGTTCAGTCTGGTAATGG 484 [Primer3Plus](http://primer3plus.com/cgi-bin/dev/primer3plus.cgi)

*B. miyamotoi* Fla R gcatcttcgatctttgaaagtg GenBank : KF990325.1

*B. miyamotoi* glpQ F CGAGCTAGAGAAAACGGACGATATT 141 (Bunikis et al., 2004)

*B. miyamotoi* glpQ R CACTGAGACTTAGTGATTTAAGTTCAGTT Custom TaqMan® Design Tool

*B. miyamotoi* glpQ Probe 6-FAM-ACGCCACTGACTTCAC- MGBNFQ

*B. miyamotoi* 16s rRNA F GCTGTAAACGATGCACACTTGGT 69 (Barbour et al., 2009)

*B. miyamotoi* 16s rRNA R GGCGGCACACTTAACACGTTAG

*B. miyamotoi* Probe VIC-CGGTACTAACCTTTCGATTA

*Ixodes* spp. ITS2 F TGC GTC GTA GCC TTC 77 (Strube et al., 2010)

*Ixodes* spp. ITS2 R AAC GGCATTCCCCTAC

*Ixodes* spp. ITS2Probe 6-VIC-TCT AAGACCTTCGCG-MGBNFQ