

Supplementary Table 1. Primer sequences used for virus screening and tick species identification

Virus	Primer Sequence (from 5' to 3')
16S rRNA for tick species	F:CTGCTCAATGATTTTTTAAATTGCTGTGG R:CCGGTCTGAACTCAGATCAAGT
Archaeal BJ1 virus	F:ACGTCGCCGCCCTGTCGCT R:TACGGGCTCGAGGAGGAC
Moloney murine sarcoma virus	F:GGCAACTGTCGACTCTGGAT R:AGCATAATCCATTGTCGAGG
Murine leukemia virus	F:CCAAGAAAGCCCAAATTTGC R:TGCTGCAGTTAGAGGAGCG
Rabies lyssavirus	F:CAAGACCTTGATGGAGGCTG R:AGAGAACCCAAATCCACCAG
Human mastadenovirus C	F:CTGTGGAGCGGAGGTTGTA R:CTTTATGCGGTCTTAGAGATC
Enterovirus A71	F1:CTGTGCAAGTTCCAACCG R1:GCCCCTGGTCTGTTTGAAC F2:CGCCACGGAAGCTAAAAG R2:CGTGGGAGGACTGCTAAGC
SFTSV	F1:GACCTCGTTGAATGCTCTTG R1:GGTCAAGAGGATGGGCAAG F2:AGAGGCTTACGCAATGAGG R2:CACTGTATGAGCCATCTGTC
Betapapillomavirus 1	F1:GATGGTGACCCTGATAATGC R1:CACTGCGGGAGGTCTTGGAG F2:CGCAGTGCCCAACGGTCAC R2:CCTCCAGTAACCGTCCAAGTC
Hepatitis B virus	F1:CCTCTGCCTAATCATCTCATG R1:CTGGATGCTGGGTCTTCC F2:CACGGTGGTCTCCATGCG R2:CATGAGATGATTAGGCAGAGG
California encephalitis orthobunyavirus	F:TGATGTTGCATCTACCGGTG R:CTGTAAATGCCAATTGTC
Human betaherpesvirus 5	F1:CGACATTTTGGAAAGTCCCG R1:CGGTAAATGGCCCGCCTGGC F2:CACCATGGTAATAGCGATG R2:GCCATTAGCCATATTATTC
Dabieshan virus	F:GATCATAGAGGAGGAGGA R:GAGGCTGGAAGTATAGTGCA
DSP4 virus	F:GCCTGAGGAGAGAATCGTTCA R:GTCTCTATGAAGGACAGTCCC
ZSP7 virus	F:ACGCTCTTCCGATCTCCCAGC R:GCCTCCATTGCCCTCAAAG