

Table S3: Classification of genes and their respective primers.

| Gene Classification | Gene Name | Forward Primer 5'→3' | Reverse Primer 5'→3' |
|----------------------------|-----------------------------------|-----------------------------|-----------------------------|
| Housekeeping genes | Aa GAPDH | CTTCTTGGCACCTCCATCAA | GGTGCAGAGTTTGTGGTAGAG |
| | Aa Histone H3 (GI:759084459) | GAAGCCAGTGAGGCATACTT | GCTCGATATCCTTTGGCATGA |
| | Aa Calreticulin (GI:3924592) | ACTACAAGGGCAAGAACCACCTCA | TCGATCTGCTTGGGTTTCCACTCA |
| | Aa GST (GI:196476640) | CTTCCCGAATTTGCCCTACTA | CGTCAAGACCGTGCTTCTTT |
| | Aa Ubiquitin (GI:759085449) | GCTGTCCGACTACAACATTCA | GGGTGGTGTAGTTCTTCTTCTT |
| | Aa β-Actin (GI:759085843) | TCCTATCCTCACCTGAAGTA | ACGCAGCTCGTTGTACAAG |
| | Aa HSP (GI:196476687) | CTCTTGTACGCAGGCTTCTTA | TATCATGATGCCGCCCTT |
| Protease Inhibitor Domains | Aam-36184 (GI:759087923) | TCCTATACGCACTGCTCCGT | CGGGGAGTTGATAATATAGCGA |
| | Aam-41471 (GI:759087921) | ACCTGCTTCTTATACGCCCT | AGTTGTTGTTATTTCCGCCG |
| | AamerSigP-40989 (GI:759089359) | ATGCAGCTCCTCACGATTTT | CCACCCTTTGTGGTTGGTAG |
| | Aam-35414 (GI:759088299) | TCATAGCCGTACTCAGCGTG | TTGAGCACAAATCCTCATGC |
| | AamerSigP-41415 (GI:759088597) | CATGAGACACCCGAGCTGTA | CAAAGGCCGCTTTTAGAGTG |
| | AamerSigP-26789 (GI:759087891) | CACTCTCAGTGGTTTTTCGCA | CCAGAGTTGCCAGCAGTTTT |

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| Lipocalins | Aam-41264 (GI:759089713) | GGCATCAATGGAAGTTGCTT | GTGTGTGAACGGACTGAACG |
| | Aam-41091 (GI:759089695) | TGAAACTAAACTCCGCTGCC | CATGTTAACCGTGCCACTTG |
| | AamerSigP-40605 (GI:759089699) | GGCACCAAACGTTTCATCTTT | GCCATTCTTTATGCGGACAT |
| | AamerSigP-12055 | GATTGTGTGGAATTGCCTCC | TTGTGTTCAGGCTGTGGTTC |
| | AamerSigP-33384 (GI:759088385) | TCATTTTTGATGCTCGTTGG | CATATGTTTTGCTCACGTCCA |
| | Aam-41375 (GI:759089833) | TTCTTTTCAACGGACCCAAG | CTGGTTTTTGGCATCCAAC |
| | AamerSigP-18604 | TCTTGCCATAACCGCTTTTC | AAATCACTTCCGTCACCAGG |
| Glycine Rich Proteins | Aam-41235 (GI:759088199) | AGCAGCCTCTCCAGTAGTGC | TCTGGAGAGCCCACCAATAC |
| | AamerSigP-34358 (GI:759089759) | TGCGAGGAGAAAGTGGAAGT | ATAATGGGACCAGGGTTTCC |
| | Aam-40766 (GI:759090089) | GATTTGGTGGCTCACTTGGT | AAGACCAGTGCCAAATCCAC |
| | AamerSigP-39259 | AGACTTTCTTGGCATGCTCC | ACTTCCACTTTCTCCTGGCA |
| | AamerSigP-41913 (GI:759088551) | GTGGAGCTGAAACCTCTGTTAG | TCTGGAGTCTCACCTTCATCTC |
| | AamerSigP-41539 (GI:759088517) | GCTAGATGACGCTGGGTTT | TCCAAGGTTTCCAGAGTTGTAG |
| | Aam-41540 (GI:759086339) | GGGAAATCTTGGCGGTATCT | GCCTCCATACCATCCGTTAAA |
| | Aam-36909 | AGCGGTGGATACAGTTTCTATG | TCCAAGACCAGTGCCAAATC |

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| | (GI:759090119) | | |
| | Aam-3099 (GI:759089715) | GCCTTCTGTCAGCTGTATGT | CGGCGTAGAGATTACCCTTTC |
| Tick Specific Genes (Unknown Function) | AamerSigP-40930 | ATGAATGCGGCAAAGCTG | TATGGCTCCGGCTGTGTA |
| | AamerSigP-41354 | GCAATGATGGTCTTTCGGTC | TCTGCAGTAGCCTGGTCCTC |
| | AamerSigP-41425 | CACTTCTCTGCGTGCTTCTG | CTGAATCATTGCTTCTGCGA |
| | AamerSigP-35954 (GI:759088829) | TTAATACAGCAAATCACCGCC | TACCGGTGATAGATGCCTCC |
| | AamerSigP-15297 (GI:759089247) | GGCATCAATGGAAGTTGCTT | GTGTGTGAACGGACTGAACG |
| | AamerSigP-39321 | AGCTGCTGTCATTCACCCTT | ATCCATGTTGTGTGCCGTC |
| | AamerSigP-22563 | TGAATGTCGCTTTGTTCTGC | GTTTGCATCTGACCTCCCAT |
| Immunity Related Proteins | Aam-12127 (GI:759085065) | AGACGAACTAAACGCAAGGG | GTTTTTGTTTAGGAACGCGG |
| | Aam-31196 | TTCAGATGGTGACCCAAACA | AAAGCACACGCTTTCATCCT |
| | Aam-6020 (GI:759087765) | GTTATCTGGTGGTTGCGGTC | ACCATGGATTATTGTTGCCG |
| | Aam-40185 (GI:759087775) | ACGTCCTCTGGTATATGCGG | CCACCAATGTTCTCCTACGC |
| | AamerSigP-41992 | TCAAGTCGTGCGTTACCTTG | CGTGATGTTTCGGTGAGCTA |
| Other Proteins | Aam-22013 | TGTTCTCCCATCAACATCA | TTTTGCCTTCAAGGTGCTTC |

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| | Aam-40687 (GI:759087721) | GCGAGCAAGAAAAGGATGAC | TTCGACGAAGCAATCAACAG |
| | AamerSigP-25878 (GI:759089279) | TACGAGCTCTCGAGGTCCAT | GGCATTTCCTCAATCTATCA |
| | Aam-5252 | GGCTGAGATCGAGAAATTCG | CCTGCTTGCTTCTCCTGTTC |
| Metalloproteases | AamerSigP-41953 (GI:759090217) | GATGCCAGCCAAGAACAGAT | TGCCAGTCAACTGTTTCCAG |
| | AamerSigP-41680 (GI:759090211) | GACGCTCAACTTGGAAGGAG | GTTGCGCTCAATCTCGTGTA |
| | AamerSigP-20700 (GI:759088021) | CTCTGCTTTTTGCAGCTGTG | CTCGTTTCCGTCATACAGCA |
| | Aam-41579 (GI:759090035) | TGGAATCGAGGATATCAGCC | TTTGTCCATGCCAGTAACCA |
| | AamerSigP-35996 (GI:759090059) | GACGCTCAACTTGGAAGGAG | TCATTTGCTCAATCTCGTG |
| | Aam-41580 (GI:759086485) | ACGAAGAAAAGATCGCCTCA | TGGCTGATATCCTCGATTCC |
| Other Primers | Reprolysin Family | CACGATGACCTGACGCTCAA | GCTCAATCTCGTGTATCA |
| | T7 Flanking | GAATTAATACGACTCACTATAGGG AGAACGATCACCTGACGCTCAA | GCTCAATCTCGTGTATCAGAAT TAATACGACTCACTATAGGGAG A |
| | 16S rRNA | AGAGTTTGATCCTGGCTCAG | CATGCTGCCTCCCGTAGGAGT |