

Supplementary Material S3, Table S4: List of PCR Primers for Target Amplification used in Study

| Primer | Target Probe | Organism | Gene | Sequence |
|-------------------|--------------|-----------------------------------|--------------------|-----------------------------|
| PrimerHi_HAI1_R | HAI1 | <i>Haemophilus influenzae</i> | <i>nucA</i> | TGAAAATTACCTGCGTTCAT |
| PrimerHi_HAI1_F | HAI1 | <i>Haemophilus influenzae</i> | <i>nucA</i> | AGCTGTGGAATTAAGTATTTT |
| PrimerHi_HAI2_R | HAI2 | <i>Haemophilus influenzae</i> | <i>nucA</i> | CATCATTTCCGTATAAATAATG |
| PrimerHi_HAI2_F | HAI2 | <i>Haemophilus influenzae</i> | <i>nucA</i> | CCTGATAAAAAGTTCAATTTTG |
| PrimerHi_HAI3_R | HAI3 | <i>Haemophilus influenzae</i> | <i>nucA</i> | ACGAACCTTCCATTTTATAG |
| PrimerHi_HAI3_F | HAI3 | <i>Haemophilus influenzae</i> | <i>nucA</i> | AATAAAGCAGGATCTAATCC |
| PrimerHi_HAI4_R | HAI4 | <i>Haemophilus influenzae</i> | <i>nucA</i> | ATTTGTTCCGACAAGATAAC |
| PrimerHi_HAI4_F | HAI4 | <i>Haemophilus influenzae</i> | <i>nucA</i> | ACCTTTAACGATGCTTATAC |
| PrimerHi_HAI5_7_R | HAI5 | <i>Haemophilus influenzae</i> | <i>cpdB</i> | TTCCGCACTTATAACTTTGA |
| PrimerHi_HAI5_7_F | HAI5 | <i>Haemophilus influenzae</i> | <i>cpdB</i> | TTCTCACTGGTTGCTTTAAT |
| PrimerHi_HAI6_R | HAI6 | <i>Haemophilus influenzae</i> | <i>cpdB</i> | AAAGCAGAATTTTTGATTGC |
| PrimerHi_HAI6_F | HAI6 | <i>Haemophilus influenzae</i> | <i>cpdB</i> | TTCATTGGGTATTGTGCTTT |
| LiMo2_3_R | LiMo2 | <i>Listeria monocytogenes</i> | <i>dltA</i> | ACCCAAGTGAAAGTAACTCGAGAG AT |
| LiMo2_3_F | LiMo2 | <i>Listeria monocytogenes</i> | <i>dltA</i> | CCTGTGCGATAGGCTTGATAACCT |
| LiMo4_6_R | LiMo4 | <i>Listeria monocytogenes</i> | <i>hlyAB</i> | TTGCCGAAAAATCTGGAAGGTCTTGT |
| LiMo4_6_F | LiMo4 | <i>Listeria monocytogenes</i> | <i>hlyAB</i> | CAACCAGATGTTCTCCCTGTAAAACG |
| Neiss1_2_R | Neiss1/2 | <i>Neisseria spp.</i> | 16S rRNA | CGCCCAGTAATTCCG ATTAACGCT |
| Neiss1_2_F | Neiss1/2 | <i>Neisseria spp.</i> | 16S rRNA | CCGCATACGCTTTGAGAAGGAAAG C |
| NsMA4_R | NsMA4 | <i>Neisseria spp.</i> | type IV PRP | ACGCTGTTTCATCCATACCGACAAAG |
| NsMA4_F | NsMA4 | <i>Neisseria spp.</i> | type IV PRP | CCCCTGGACGATAATCAGACCAT |
| NsMA7_8_R | NsMA7 | <i>Neisseria meningitidis</i> A | <i>sacB</i> | ATGGTGCAAGCTGGTTTCAATAGCA |
| NsMA7_8_F | NsMA7 | <i>Neisseria meningitidis</i> A | <i>sacB</i> | GGGTCAACTCAGAAGATAAGAATTGG |
| NsMa9_R | NsMa9 | <i>Neisseria meningitidis</i> A | <i>sacB</i> | GTGCTGAGTTTCATGTCAACATGAGC |
| NsMa9_F | NsMa9 | <i>Neisseria meningitidis</i> A | <i>sacB</i> | AGCTCAATCAAATATTTCTTCAACCT |
| NsMC1_R | NsMCD1 | <i>Neisseria meningitidis</i> C/D | <i>SiaD/SynC</i> | TGTGCAGGTTGGATAGTTTGTAGAAG |
| NsMC1_F | NsMCD1 | <i>Neisseria meningitidis</i> C/D | <i>SiaD/SynC</i> | ACCACACAAAATATGAAAATGCCGAA |

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| NsMC2_R | NsMCD2 | <i>Neisseria meningitidis</i> C/D | <i>SiaD/SynC</i> | CTGCTTAAC TTTATTAAGGGCATTGT |
| NsMC2_F | NsMCD2 | <i>Neisseria meningitidis</i> C/D | <i>SiaD/SynC</i> | AGCCCAACAAGAGAACACCGC |
| NsMC4_5_R | NsMCD4/5 | <i>Neisseria meningitidis</i> C/D | <i>SiaD/SynC</i> | ATCACTACTAGACGGGGATTAATTGT |
| NsMC4_5_F | NsMCD4/5 | <i>Neisseria meningitidis</i> C/D | <i>SiaD/SynC</i> | CAACCTATGCCCCACTCTTAGAATCA |
| NsMW1_F | NsMW1-4 | <i>Neisseria meningitidis</i> W | <i>synG</i> | AGGTGAATCTTCCGAGCAGGAAATT |
| NsMW1_R | NsMW1-4 | <i>Neisseria meningitidis</i> W | <i>synG</i> | AAGCTGCGCGGAAGAATAGTGA |
| NsMX1_4_F | NsMX1-4 | <i>Neisseria meningitidis</i> X | <i>xcbA/B</i> | GCAAAGCAAAAACTTCGTACACTGA |
| NsMX1_4_R | NsMX1-4 | <i>Neisseria meningitidis</i> X | <i>xcbA/B</i> | GGGCAACAATACCAATAAACGGTTG |
| NsMX2_F | NsMX2 | <i>Neisseria meningitidis</i> X | <i>xcbB</i> | ACAAATGCGACATCCAGCCTGA |
| NsMX2_R | NsMX2 | <i>Neisseria meningitidis</i> X | <i>xcbB</i> | AGTATTGCCGCGTAGATGATTAACAA |
| NsMX5_F | NsMX5 | <i>Neisseria meningitidis</i> X | <i>xcbB</i> | ACGCAGCTTGGTCAAAAACGTCTA |
| NsMX5_R | NsMX5 | <i>Neisseria meningitidis</i> X | <i>xcbB</i> | GCGCCACCTTTACTGCCTCCAT |
| NsMY1_5_F | NsMY1-5 | <i>Neisseria meningitidis</i> Y | <i>synF</i> | GGTGAATCTTCCGAGCAGGAAATTTA |
| NsMY1_5_R | NsMY1-5 | <i>Neisseria meningitidis</i> Y | <i>synF</i> | AGCTGCGCGGAAGAATAGTGAAA |
| SaGAL1_2_3_F | SaGAL1-3 | <i>Streptococcus agalactiae</i> | <i>pcsB</i> | ATCGTGTTGTTGCTATTTCGTGAGGT |
| SaGAL1_2_3_R | SaGAL1-3 | <i>Streptococcus agalactiae</i> | <i>pcsB</i> | GCAACAGTAGTTGCCGAAGAAGTAGC |
| SaGAL4_F | SaGAL4 | <i>Streptococcus agalactiae</i> | <i>pcsB</i> | CGTGCAGCTGGTTATTCTGTAGGAAC |
| SaGAL4_R | SaGAL4 | <i>Streptococcus agalactiae</i> | <i>pcsB</i> | AGCACTAGGGTTAAATGAACCACGG |
| SaGAL5_7_F | SaGAL5&7 | <i>Streptococcus agalactiae</i> | <i>sip</i> | AGCTTCTGTTGCCGCTGAAACAC |
| SaGAL5_7_R | SaGAL5&7 | <i>Streptococcus agalactiae</i> | <i>sip</i> | GGAGCCTTGCAATTTTCAGGATGTG |
| SaGAL6_8_F | SaGAL6&8 | <i>Streptococcus agalactiae</i> | <i>sip</i> | ACCAATCAAGTTTCTGTTGCAGACCA |
| SaGAL6_8_R | SaGAL6&8 | <i>Streptococcus agalactiae</i> | <i>sip</i> | GGAGCTGGTGATACCTGTTCATTAGC |
| Strep1_3_F | Strep1-3 | <i>Streptococcus</i> spp. | <i>16S rRNA</i> | CCATTGCCGAAGATTCCCTACT |
| Strep1_3_R | Strep1-3 | <i>Streptococcus</i> spp. | <i>16S rRNA</i> | TGGAAACGATAGCTAATACCGCATAA |
| SPne1_F | SPne1 | <i>Streptococcus pneumoniae</i> | <i>ply</i> | CAGCTACCCGATGAGTTTGTGTTGTTAT |
| SPne1_R | SPne1 | <i>Streptococcus pneumoniae</i> | <i>ply</i> | GCTGGGGTCTTCCAATTGGAGA |
| SPne10_11_F | SPne10-11 | <i>Streptococcus pneumoniae</i> | <i>sulB</i> | CAAGGGCTCGACTATTGCTTTTTTTGA |
| SPne10_11_R | SPne10-11 | <i>Streptococcus pneumoniae</i> | <i>sulB</i> | AAGTCCACCCATGCCAACTTCC |
| SPne12_F | SPne12 | <i>Streptococcus pneumoniae</i> | <i>sulB</i> | CTCCAGAAGCCTTGCTGTGATTGA |

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|-----------------|---------------|---------------------------------|-----------------------|-----------------------------|
| SPne12_R | SPne12 | <i>Streptococcus pneumoniae</i> | <i>sulB</i> | AGGCTAGTCTGGAAGCGACCT |
| SPne2_F | SPne2 | <i>Streptococcus pneumoniae</i> | <i>ply</i> | ACTCTGTCCATTTCAGGCGAAAAGC |
| SPne2_R | SPne2 | <i>Streptococcus pneumoniae</i> | <i>ply</i> | AGCCTCTACTTCATCACTCTTACTCG |
| SPne3_4_5_F | SPne3-5 | <i>Streptococcus pneumoniae</i> | <i>dexB</i> | CCGATTGAAGAAATCATGGACAGTAT |
| SPne3_4_5_R | SPne3-5 | <i>Streptococcus pneumoniae</i> | <i>dexB</i> | GCCGCAGTGTTTTCAATCAAGACAGA |
| SPne6_F | SPne6 | <i>Streptococcus pneumoniae</i> | <i>dexB</i> | CGATTGCGGCTATTTTTGGAACCAT |
| SPne6_R | SPne6 | <i>Streptococcus pneumoniae</i> | <i>dexB</i> | GTTTCATCGCGCCAGATATAGTAGTCT |
| SPne7_F | SPne7 | <i>Streptococcus pneumoniae</i> | <i>cap</i> | CCGATGGAAGAAATCATGGACAGTAT |
| SPne7_R | SPne7 | <i>Streptococcus pneumoniae</i> | <i>cap</i> | CCAGCGCTTCTTGAACGTTGATTTC |
| SPne9_F | SPne9 | <i>Streptococcus pneumoniae</i> | <i>sulB</i> | GAAAGAAATTGAAAACAATCAATGGA |
| SPne9_R | SPne9 | <i>Streptococcus pneumoniae</i> | <i>sulB</i> | GTAATGAATGAGATAGGGCGAGC |
| StAU1_2_3-F | StAU1-3 | <i>Staphylococcus aureus</i> | NWMN_2357 | GCGCCATAACTCATACCAGATTGTCC |
| StAU1_2_3-R | StAU1-3 | <i>Staphylococcus aureus</i> | NWMN_2357 | ATTTTCTGGGGATAATGAAGGGAAAC |
| StAU11_femA-F | StAU11 | <i>Staphylococcus aureus</i> | <i>femA</i> | CAAGAACATGGCAATGAATTACCCAT |
| StAU11_femA-R | StAU11 | <i>Staphylococcus aureus</i> | <i>femA</i> | AACTTAACTACGCCAGCATCTTCAG |
| StAU3_Spa-F | StAU3 | <i>Staphylococcus aureus</i> | <i>Spa</i> | GGCAAAGAAGATGGCAACAAACCTG |
| StAU3_Spa-R | StAU3 | <i>Staphylococcus aureus</i> | <i>Spa</i> | CCGTTGCCGTCTTCTTTACCAGG |
| StAU4-F | StAU4 | <i>Staphylococcus aureus</i> | NWMN_1707/1708 | TGCTCCTTTTTTTATATTGTAAACG |
| StAU4-R | StAU4 | <i>Staphylococcus aureus</i> | NWMN_1707/1708 | ACTGACATGTTGATGCATGTCTT |
| StAU5-F | StAU5 | <i>Staphylococcus aureus</i> | <i>SplB</i> | CACGCTCTTCAACTTGAATGACTGAT |
| StAU5-R | StAU5 | <i>Staphylococcus aureus</i> | <i>SplB</i> | CATCAAGAGTTTAGCAGCATTAAACAA |
| StAU6-F | StAU6 | <i>Staphylococcus aureus</i> | <i>SplF</i> | ACTTATCACATGAAAGTCGGTGATGA |
| StAU6-R | StAU6 | <i>Staphylococcus aureus</i> | <i>SplF</i> | ACAACCGCATCAGATGTCACTATAT |
| StAU7_8-F | StAU7&8 | <i>Staphylococcus aureus</i> | <i>SplC</i> | ATGGCGTCTACTTTACACCAGAAAT |
| StAU7_8-R | StAU7&8 | <i>Staphylococcus aureus</i> | <i>SplC</i> | CTGTCGCATCTTTAAATGAAACGAC |
| StAU9_mecA-F | StAU9 | <i>Staphylococcus aureus</i> | <i>mecA</i> | CAAACCTACGGTAACATTGATCGCAAC |
| StAU9_mecA-R | StAU9 | <i>Staphylococcus aureus</i> | <i>mecA</i> | TTGGAACGATGCCTATCTCATATGC |
| StAUA1_2_B1_2-F | StAUA1&2/B1&2 | <i>Staphylococcus aureus</i> | <i>spa</i> | CACGATGAAGCTCAACAAAATGCTTT |
| StAUA1_2_B1_2-R | StAUA1&2/B1&2 | <i>Staphylococcus aureus</i> | <i>spa</i> | AGGCATGTTCAAGATTTTCATAGAAGG |

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| StAUA1_2B1_2_Spa-F | StAUA1&2/B1&2 | <i>Staphylococcus aureus</i> | <i>spa</i> | GTGGCGTAACACCTGCTGCAA |
| StAUA1_2B1_2_Spa-R | StAUA1&2/B1&2 | <i>Staphylococcus aureus</i> | <i>spa</i> | ACCAGGCTTGTTGTTGTCTTCTTGC |
| StAUA10_femBb-F | StAUA10 | <i>Staphylococcus aureus</i> | <i>spa</i> | CTGAGTATGATACATCGAGCCAAG |
| StAUA10_femBb-R | StAUA10 | <i>Staphylococcus aureus</i> | <i>spa</i> | ATACAAATCCAGCACGCTCTTC |
| StAUA10_femB-F | StAUA10 | <i>Staphylococcus aureus</i> | <i>spa</i> | ACTGAGTATGATACATCGAGCCAAG |
| StAUA10_femB-R | StAUA10 | <i>Staphylococcus aureus</i> | <i>spa</i> | ACAAATCCAGCACGCTCTTCAGT |
| StAUA3_4_B4b-F | StAUA3 | <i>Staphylococcus aureus</i> | <i>spa</i> | GTTGTCTTCCTCTTTTGGTGCTT |
| StAUA3_4_B4b-R | StAUA3 | <i>Staphylococcus aureus</i> | <i>spa</i> | AAACGAAGAACAACGCAATGGT |
| StAUA3_4_B4-F | StAUA3 | <i>Staphylococcus aureus</i> | <i>spa</i> | CGAAGAACAACGCAATGGTTTCATCC |
| StAUA3_4_B4-R | StAUA3 | <i>Staphylococcus aureus</i> | <i>spa</i> | GTTGTCTTCCTCTTTTGGTGCTTGAG |
| TB ESAT6 1-F | TB ESAT6 | <i>Mycobacterium tuberculosis</i> | ESAT6 | ATGACAGAGCAGCAGTGGAATTT |
| TB ESAT6 1-R | TB ESAT6 | <i>Mycobacterium tuberculosis</i> | ESAT6 | ATGCGAACATCCCAGTGACGTTG |
| MTB1_2b-F | MTB1&2 | <i>Mycobacterium tuberculosis</i> | IS6110 | GAGGAGGTACCCGCCGGAGCTG |
| MTB1_2b-R | MTB1&2 | <i>Mycobacterium tuberculosis</i> | IS6110 | TTAGCGTGCTGGCCGGTCGA |
| MTB1_2-F | MTB1&2 | <i>Mycobacterium tuberculosis</i> | IS6110 | ATGTCAGGTGGTTCATCGAGGA |
| MTB1_2-R | MTB1&2 | <i>Mycobacterium tuberculosis</i> | IS6110 | TTAGCGTGCTGGCCGGTC |
| MTB3_4-F | MTB3&4 | <i>Mycobacterium tuberculosis</i> | 16S rRNA | GTTCCGCTTCGTTGAAGAGATGATCC |
| MTB3_4-R | MTB3&4 | <i>Mycobacterium tuberculosis</i> | 16S rRNA | CGCCTAACAGCATACCCGTTTCG |
| B2M1-F | B2M1 | <i>Homo sapiens</i> | B2M | CTACTTTGAGTGCTGTCTCCATGTT |
| B2M1-R | B2M1 | <i>Homo sapiens</i> | B2M | AGCTTTGAGTGCAAGAGATTGAAGAG |
| G6PD-F | G6PD1 | <i>Homo sapiens</i> | G6PD | GTCCCACCAACTCTGCACTCCA |
| G6PD-R | G6PD1 | <i>Homo sapiens</i> | G6PD | TTTTTTGGCTGTTTGCGGATTTAATG |
| PGK-F | PGK1 | <i>Homo sapiens</i> | PGK | CAGCAGCAGTGGAGAGATGGG |
| PGK-R | PGK1 | <i>Homo sapiens</i> | PGK | GGAACAGAGCCTTCCTCCATGGTA |
| APRR5A-F | APRR5A | <i>Arabidopsis thaliana</i> | APRR5 | AGGAGCCATTGCAGATGTATAAGC |
| APRR5A-R | APRR5A | <i>Arabidopsis thaliana</i> | APRR5 | AAGCCAACAGCAATGCACCATCAG |