

Oligonucleotides	Sequences	Amplicons and comments
bvgS-Up bvgS-Lo	5'-TTCTAGACATTGCGAAGATCG-3' 5'-ATAAGCTTCATGGTCAGCCTCAGGTCC-3'	526 bp <i>XbaI-HindIII</i> <i>bvgS</i> fragment for construction of BPSM _{Δ<i>bvgAS</i>} and allelic exchange
bvgA-Up bvgA''-Lo	5'-TAGAATTCAACGGCATTGACGGGCTCA-3' 5'-TAGGTACCCTAGTTGGACAACACGCTGATGA-3'	504 bp <i>EcoRI-KpnI</i> <i>bvgA</i> fragment for construction of BPSM _{Δ<i>bvgAS</i>}
bvgA-Lo	5'-ATACTAGTGACGTGGCGTTCAGCTTCTG-3'	504 bp <i>EcoRI-SpeI</i> <i>bvgA</i> fragment for allelic exchange (used with bvgA-Up)
bvgA'-Up bvgA'-Lo	5'-AGCCATTCCTTTGACGCATCA-3' 5'-CAGATCAGACTGCGGGGGTAC-3'	762 bp fragment coding for BvgA (sequencing)
VFT1-Up VFT1-Lo	5'-ATACTAGTGGAAGCTGATAGACCTCGCCAA-3' 5'-TAGGATCCCAGTCCCCAGCGGTAGATCA-3'	904 bp <i>SpeI-BamHI</i> fragment coding for VFT1 (cassette exchange)
VFT1'-Up VFT1'-Lo	5'-GCAGAAGCTGAACGCCACGTC-3' 5'-ATTCAGGACCGCCACCTTGAC-3'	1020 bp fragment coding for VFT1 (sequencing)
VFT2-Up VFT2-Lo	5'-TAGGATCCAGCATTTCGCTCGATTTCG-3' 5'-GGTAGATCTCGTTGCGGTAGG-3'	786 bp <i>BamHI-BglII</i> fragment coding for VFT2 (cassette exchange)
VFT2'-Up VFT2'-Lo	5'-GCCTGCTGCGGGTGGTCA-3' 5'-TCGATGAGCACGCGCATGAAT-3'	1000 bp fragment coding for VFT2 (sequencing)
PAS/HisKin-Up Δ <i>EcoRI</i> -Lo Δ <i>EcoRI</i> -Up PAS/HisKin-Lo	5'-ACCGCAACGAGATCTACCTG-3' 5'-AAATTCCAGCTGGTCGTTC-3' 5'-GAACGACCAGCTGGAATTTATGCGCGTGCTCATCGACGG-3' 5'-TATCTAGAATGTCGCCTATCAGC-3'	708 bp <i>BglII-XbaI</i> fragment coding for the PAS and Histidine Kinase domains (overlapping PCR to remove <i>EcoRI</i> site from the cassette). PAS/HisKin-Up and Lo also used for sequencing
R-Up R-Lo	5'-CCGGGCCAAGACCACGTTTCCT-3' 5'-TGCACCGCGTACGTCCGTAAC-3'	1007 bp fragment coding for receiver domain of BvgS (sequencing)
Hpt-Up Hpt-Lo	5'-ACTACCTGGGCCAGCGTGTC-3' 5'-CGGTATCTGCTGGGCGACCAT-3'	879 bp fragment coding for Hpt domain of BvgS (sequencing)