

S5 Table. Comparison of genetic contents of vSaβ structures in ST59 MRSA.^a

| vSaβ in strain 4578: annotation or function | vSaβ in strain PM1 | vSaβ in strain 187-4 |
|--|---------------------------------|----------------------|
| orf1 | + | + |
| orf2 | + | + |
| orf3 | + | + |
| hypothetical protein | + | + |
| putative helicase | + | + |
| hyaluronate lyase precursor | + | + |
| peptidase family | + | + |
| truncated HsdS | + | + |
| <i>att</i> site | + | + |
| staphylococcal complement inhibitor SCIN | + | - |
| phage lysin, N-acetylmuramoyl-L-alanine amidase, truncated | + | - |
| staphylokinase SAK | - | - |
| autolysin | - | - |
| holin | - | - |
| hypothetical protein | - | - |
| staphylococcal enterotoxin P, SEP | - | - |
| hypothetical protein | - | - |
| hypothetical protein | - | - |
| phi77 ORF044-like protein | - | - |
| phi77 ORF109-like protein | - | - |
| phi77 ORF002-like protein, phage minor structural protein | - | - |
| phi77 ORF004-like protein, putative phage tail component | - | - |
| phi77 ORF001-like protein, phage tail tape measure protein | - | - |
| phi77 ORF100-like protein | - | - |
| conserved hypothetical phage protein | - | - |
| hypothetical phage protein | - | - |
| phi77 ORF020-like protein, phage major tail protein | - | - |
| conserved hypothetical phage protein | - | - |
| conserved hypothetical phage protein | - | - |
| hypothetical protein | - | - |
| phi77 ORF006-like protein, putative capsid protein | - | - |
| phi77 ORF015-like protein, putative protease | - | - |
| phage portal protein | - | - |
| phi77 ORF003-like protein, phage terminase, large subunit | - | - |
| conserved hypothetical phage protein | - | - |
| phi77 ORF040-like protein | - | - |
| phi77 ORF026-like protein, putative phage transcriptional acti | - | - |
| phi77 ORF071-like protein | - | - |
| phiPVL ORF057-like protein, transcriptional activator RinB | - | - |
| phi77 ORF031-like protein | - | - |
| phi77 ORF069-like protein | - | - |
| hypothetical protein | - | - |
| putative dUTPase | - | - |
| hypothetical protein | - | - |
| phage protein | - | - |
| phiPVL ORF051-like protein | - | - |
| phiPVL ORF050-like protein | - | - |
| putative endodeoxyribonuclease | - | - |
| conserved hypothetical phage protein | - | - |
| phiPVL ORF046-like protein | - | - |
| single-strand binding protein | - | - |
| phiPVL ORF044-like protein | - | - |
| putative phage-related DNA recombination protein | - | - |
| phiPVL ORF41-like protein | - | - |
| phiPVL ORF39-like protein | - | - |
| conserved hypothetical phage protein | - | - |
| conserved hypothetical phage protein | - | - |
| hypothetical protein | - | - |
| hypothetical protein | - | - |
| phi77 ORF014-like protein, phage anti-repressor protein | - | - |
| conserved hypothetical phage protein | - | - |
| DNA-binding protein | - | - |
| phi77 ORF011-like protein, phage transcriptional repressor | - | - |
| putative exonuclease | - | - |
| hypothetical protein | - | - |
| hypothetical protein | - | - |
| integrase | - | - |
| <i>att</i> site | - | - |
| truncated chemotaxis inhibitory protein CHIPS, lack 5'-end | +/- (full length of CHIPS gene) | + |
| Phage lysin, N-acetylmuramoyl-L-alanine amidase, truncated | + | + |
| IstB helper protein | + | + |
| trasposase of IS232 | + | + |
| Hypothetical protein | + | + |

^a +: presence; -: absence; +/-: divergency