Supplementary Table S4. *Staphylococcus aureus* SdrD amino acid sequence: localization of amino acid substitutions and deletions.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strain | Protein  accession number | Number of amino acids | Query  Cover  (%) | Per.  Ident  (%) | Number of amino acid substitutions in the structural domains of the protein | | | | | | Number of SD dipeptides |
| S  1-35 | A  36-550 | Spacer region 551-559 | Subdomains B (B1-B5)  560-1113 | R  1114-1320 | WMC  1314-1374 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| NCTC  8325 | SQF72859.1 | 1349 | 100 | **97.32** | - | - | - | 3 | 1 | 2 | 80 |
| Newman | WP\_000934419.1 | 1315 | **95** | **99.92** | - | - | - | - | 1 | - | 63 |
| Col | WP\_000934424.1 | 1381 | 100 | 100 | - | - | - | - | - | - | 96 |
| FPR3757 | WP\_000934424.1 | 1381 | 100 | 100 | - | - | - | - | - | - | 96 |
| N315 | WP\_000934467.1 | 1385 | **81** | **93.77** | - | 62 | - | 2 | 1 | - | 98 |
| MW2 | WP\_000934435.1 | 1347 | 100 | **96.16** | - | 13 | - | 3 | 1 | - | 79 |
| 55/2053 | AGT63464.1 | 1360 | **81** | **82.77** | - | 151 | - | 17 | - | - | 93 |
| Bmb9393 | AGP27562.1 | 1381 | 100 | 100 | - | - | - | - | - | - | 96 |
| Be62 | WP\_000934424.1 | 1381 | 100 | 100 | - | - | - | - | - | - | 96 |
| TW20 | CBI48511.1 | 1381 | 100 | **99.93** | - | 1 | - | 1 |  | - | 96 |

Supplementary Table S4. *Staphylococcus aureus* SdrD amino acid sequence: localization of amino acid substitutions and deletions (continued).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| JKD6008 | WP\_000934423.1 | 1375 | 100 | **97.57** | - | - | - | - | - | - | 93 |
| T0131 | WP\_000934424.1 | 1381 | 100 | 100 | - | - | - | - | - | - | 96 |
| Z172 | AGY88666.1 | 1369 | 100 | **98.99** | - | - | - | 1 | 1 | - | 90 |
| V521 | WP\_063655687.1 | 1375 | 100 | **99.42** | - | 1 | - | 1 | 1 | - | 93 |
| SA943 | RAM46169.1 | 1381 | 100 | 100 | - | - | - | - | - | - | 96 |
| MRSA252 | No protein | - | - | - | - | - | - | - | - | - | - |

Note: S - N- terminal signal sequence; А - domain with ligand binding N2/N3 subdomains; B1-B5 - recurring B subdomains; R - serine-aspartate

dipeptide region; WMC - wall-spanning segment.