Supplementary Table S7. The Agr loсus proteins amino acid sequence.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Strain | AgrA | | AgrB | | | | AgrD | | | |
|  | Protein accession number | Num-ber of amino acids  (aa) | Protein accession number | Num-ber of amino acids  (aa) | Query Cover (%)/ Per. Ident (%) | Num-ber of amino acids substitu-tions | Protein accession number | Num-ber of amino acids (aa) | Query Cover (%)/ Per. Ident (%) | Num-ber of amino acids substi-tutions  (aa) |
| NCTC  8325 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| Newman | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| Col1 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| FPR3757 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| N315 | WP\_000688492.1 | 238 | WP\_001105696.1 | 187 | **100/63.43** | **74** | WP\_001094921.1 | 47 | **97/47.83** | **25** |
| MW2 | WP\_000688492.1 | 238 | [WP\_001105705.1](https://www.ncbi.nlm.nih.gov/protein/447028449) | 187 | **100/79.14** | **39** | WP\_001093929.1 | 46 | 100/100 | no |
| 55/2053 | WP\_000688492.1 | 238 | WP\_001105709.1 | 187 | **100/78.07** | **41** | WP\_000735197.1 | 46 | **100/52.17** | **22** |
| MRSA252 | WP\_00688492.1 | 238 | [WP\_001105709.](https://www.ncbi.nlm.nih.gov/protein/447028453)1 | 187 | **100/78.07** | **41** | [WP\_000735197.](https://www.ncbi.nlm.nih.gov/protein/446657851)1 | 46 | 100/100 | no |
| T0131 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| TW20 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| JKD6008 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| Z172 | WP\_000688492.1 | 238 | WP\_001105707.1 | 189 | 100/100 | no | WP\_001093929.1 | 46 | 100/100 | no |
| V521 | AND36710.1 | 2592 | WP\_001105707.1 | 189 | 100/100 | no | [AND36708.1](https://www.ncbi.nlm.nih.gov/protein/1026652135) | 46 | 100/100 | no |
| Bmb9393 | WP\_000688492.1 | 238 | [AGP28987.1](https://www.ncbi.nlm.nih.gov/protein/520998347) | 207 | **91/99.473** | **1** | WP\_001093929.1 | 46 | 100/100 | no |
| Be62 | WP\_000688492.1 | 238 | ALY23941.1 | 207 | **91/99.473** | **1** | [WP\_001093929.1](https://www.ncbi.nlm.nih.gov/protein/447016673) | 46 | 100/100 | no |
| SA943 | RAM 45557.1 | 238 | RAM 45555.1 | 189 | 100/100 | no | RAM45556.1 | 46 | 100/100 | no |

Supplementary Table S7. The Agr locus proteins amino acid sequence (continued).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strain | AgrC | | | |
| Protein accession number | Number of amino acids  (aa) | Query Cover (%) / Per.Ident (%) | Substitutions/ deletions/ incisions (aa) |
| NCTC8325 | YP\_500745.1 | **414** | 100/**99.76** | ***P247T*;** |
| Newman | WP\_001554031.1 | 430 | 100/**99.77** | ***P247T*** |
| Col1 | WP\_010956571.1 | 430 | 100/100 | no |
| FPR3757 | WP\_001549202.1 | 430 | 100/ **99.53** | ***P247T****;* ***I309F*** |
| N315 | BAB43125.1 | **371** | **98/73.35** | Region 69-204: 98 substitutions; deletions: 1-66;427-430; incision: 1-7 |
| MW2 | WP\_000387809.1 | 430 | 100/**76.51** | Region 1-204: 91 substitutions;  further: **P247T**; ***P258T; I280L; I297L; S320T; S321R; 345 T/S*** |
| 55/2053 | WP\_000387809.1 | 430 | 100/**76.51** | Регион 1-204: 91 substitutions;  further: **P247T**; ***P258T; I280L; I297L; S320T; S321R; T345S*** |
| MRSA252 | WP\_000387814.1 | 430 | 100/**76.51** | Region 1-204: 92 substitutions;  further: ***247 P/T****;* ***258 P/T; I280L; I297L; S320T; S321R; 345T/S*** |
| T0131 | AEB89137.1 | **233** | 100/**99.1** | Deletions 1-207, substitutions: ***247 P /T;* *311 I/T*** |
| TW20 | CBI49894.1 WP\_014532426.1 | 430 | 100/**99.53** | ***S6R***; **P247T** |
| JKD6008 | WP\_001554031.1 | 430 | 100/**99.77** | ***P247T****;* |
| Z172 | WP\_014532426.1 | 430 | 100/**99.53** | ***S6R***; ***P247T*;** |
| V521 | WP\_014532426.1 | 430 | 100/**99.53** | ***6 S/R***; ***P247T*;** |
| Bmb9393 | WP\_001554031.1 | 430 | 100**/99.77** | ***P247T;*** |
| Be62 | WP\_001554031.1 | 430 | 100**/99**.77 | ***P247T;*** |
| SA943 | [RAM45580.1](https://www.ncbi.nlm.nih.gov/protein/1408595206) | **414** | 100/**99.52** | ***P247T; I311T; A343T;*** deletion 415-430 |

Note: 1 - the analysis was carried out by align to the reference sequence of the protein in strain Col; 2 - the first 237 amino acids are identical, the C-terminal end contains an additional 22 amino acids; 3- Insertion 1-18aa and substitution ***M1L*** were identified.