SupplementaryTable 1. *S. aureus* SA943 virulom.

|  |  |  |
| --- | --- | --- |
| Protein group | Protein | Protein accesssion number |
| 1 | 2 | 3 |
| **Hemolysins** | Alpha-hemolysin | RAM45765.1 |
| Beta-hemolysin | RAM45197.1 |
| Gamma-hemolysin subunit A | RAM47209.1 |
| Gamma-hemolysin subunit В | RAM47121.1 |
| Gamma-hemolysin subunit С | RAM47120.1 |
| Hemolysin III | RAM45352.1 |
| **Leukocidin**s | LukED subunit D | RAM45663.1 |
| LukED subunit Е | RAM45662.1 |
| LukGH subunit H | RAM45195.1 |
| LukGH subunit G | RAM45196.1 |
| **Phenol-soluble modulins** | Phenol-soluble modulin export ABC transporter ATP-binding protein PmtA | RAM45801.1 |
| Phenol-soluble modulin export ABC transporter permease subunit PmtB | RAM45802.1 |
| Phenol-soluble modulin export ABC transporter ATP-binding protein PmtC | RAM45803.1 |
| Phenol-soluble modulin export ABC transporter permease subunit PmtD | RAM45804.1 |
| Beta-class phenol-soluble modulin | RAM45753.1 |
| Beta-class phenol-soluble modulin | RAM45754.1 |
| Phenol-soluble modulin PSM-alpha-1 | RAM45730.1 |
| Phenol-soluble modulin PSM-alpha-2 | RAM45731.1 |
| Phenol-soluble modulin PSM-alpha-3 | RAM45732.1 |
| Phenol-soluble modulin PSM-alpha-4 | RAM45733.1 |
| Delta-lysin family phenol-soluble modulin | RAM45554.1 |
| Phenol-soluble modulin PSM-mec | RAM45233.1 |
| **Enterotoxins** | Enterotoxin Q (SEQ) | RAM45503.1 |
| Enterotoxin K (SEK) | RAM45504.1 |
| Enterotoxin A | RAM45425.1 |
| Enterotoxin 26 | RAM47603.1 |
| **Superantigen-lilke proteins(SSL)** | SSL1 | RAM45984.1 |
| SSL2 | RAM45983.1 |
| SSL3 | RAM45982.1 |
| SSL4 | RAM45980.1 |
| SSL5 | RAM45979.1 |
| SSL6 | RAM45978.1 |
| SSL7 | RAM45977.1 |
| SSL8 | RAM45976.1 |
| SSL9 | RAM45975.1 |
| SSL10 | RAM45974.1 |
| SSL11 | RAM45728.1 |
| SSL12 | RAM45762.1 |
| SSL13 | RAM45761.1 |
| SSL14 | RAM45760.1 |
| **Serine (Spl) and cysteine proteases** | Serine protease (SplA) | RAM45676.1 |
| Serine protease (SplB) | RAM45677.1 |
| Serine protease (SplC) | RAM45678.1 |
| Serine protease (SplF) | RAM45679.1 |
| Мембраносвязанная сериновая протеаза | RAM47657.1 |
| Serine endopeptidase SspA | RAM47318.1 |
| S41 family peptidase | RAM47419.1 |
| Rhomboid family intramembrane serine protease | RAM47553.1 |
| Cysteine protease staphopain B | RAM47317.1 |
| Cysteine protease staphopain A | RAM45827.1 |

Supplementary Table 1 (continued).

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| **Serine (Spl) and cysteine proteases** | Staphostatin B | RAM47316.1 |
| S8 family serine peptidase | RAM45670.1 |
| Zinc metalloproteinase aureolysin | [RAM45971.1](https://www.ncbi.nlm.nih.gov/protein/RAM45971.1) |
| **Adhesions and invasions** | Coagulase | RAM47813.1 |
| Catalase | RAM46449.1 |
| Thermonuclease | RAM46449.1 |
| YSIRK domain-containing triacylglycerol Lip1 | [RAM45969.1](https://www.ncbi.nlm.nih.gov/protein/1408595602) |
| Glycerol kinase GlpK | RAM46556.1 |
| Aerobicglycerol-3-phosphate dehydrogenase | RAM46555.1 |
| Immunoglobulin G-binding protein A | RAM47916.1 |
| Immunoglobulin G-binding protein Sbi | RAM47117.1 |
| MSCRAMM family adhesin clumping factor ClfA | RAM45532.1 |
| MSCRAMM family adhesin clumping factor ClfВ | RAM45959.1 |
| Cna B-type domain-containing protein | RAM46073.1 |
| Elastin-binding protein EbpS | RAM47482.1 |
| Extracellular matrix protein-binding adhesin Emp | RAM45531.1 |
| MSCRAMM family adhesin SdrE | RAM46170.1 |
| MSCRAMM family adhesin SdrC | RAM46168.1 |
| MSCRAMM family adhesin SdrD | RAM46169.1 |
| Serine-enriched repetitive glycoprotein adhesin SasA | RAM45936.1 |
| Cell wall anchored protein SasF | RAM45943.1 |
| Virulence-assosiated cell-wall anchored protein SasG | RAM47201.1 |
| Class A sortase SrtA | RAM46780.1 |
| Class B sortase SrtВ | RAM45126.1 |
| Fibronectin-binding protein A | RAM46647.1 |
| Complement inhibitor SCIN-B | RAM45768.1 |
| Efb fibrinogen-binding protein | RAM45769.1 |
| Ecb complement convertase inhibitor | RAM45773.1 |
| Intercellular adhesin biosynthesis polysaccharide N-deacetylase | RAM45922.1 |
| Polysaccharide biosynthesis protein | RAM45388.1 |
| Poly-beta-1,6-N-acetyl-D-glucosamine synthesis protein IcaD | RAM45923.1 |
| Poly-beta-1,6 N-acetyl-D-glucosamine synthase IcaA | RAM45924.1 |
| Ica operon transcriptional regulator IcaR | RAM45925.1 |
| Capsule biosynthesis protein CapA | RAM45926.1 |
| Polysaccharide biosynthesis tyrosine autokinase | RAM45927.1 |
| Tyrosine-protein phosphatase | RAM45928.1 |
| Type 8 capsular polysaccharide synthesis protein Cap8K | RAM47868.1 |
| Type 8 capsular polysaccharide synthesis protein Cap8I | RAM47870.1 |
| Type 8 capsular polysaccharide synthesis protein Cap8H | RAM47871.1 |
| Type 8 capsular polysaccharide synthesis protein Cap8F | RAM47873.1 |
| Type 8 capsular polysaccharide synthesis protein Cap8C | RAM47876.1 |
| Type 8 capsular polysaccharide synthesis protein Cap8B | RAM47877.1 |
| LPXTG-anchored adenosine synthase AdsA | RAM46119.1 |
| BsaG protein | RAM45673.1 |
| Extracellular adherence protein Eap/Map | RAM45198.1 |
| MAP domain-containing protein | RAM45199.1 |
| **Regulatory factors** | Accessory gene regulator protein A AgrА | RAM45557.1 |
| Accessory gene regulator protein B AgrB | RAM45555.1 |
| Вспомогательный генный регулятор AgrC | RAM45580.1 |
| Cyclic lactone autoinducer peptide (regulator protein agrD) | RAM45556.1 |
| Global transcriptional regulator SarA | RAM46821.1 |
| HTP- type transcriptional regulator SarR | RAM46294.1 |
| HTP- type transcriptional regulator SarS | RAM47915.1 |
| HTP- type transcriptional regulator SarT | RAM47202.1 |
| HTP-type transcriptional regulator SarX | RAM47004.1 |
| Регулятор транскрипции SarZ | ? |

Supplementary Table 1 (continued).

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| **Regulatory factors** | HTP- type transcriptional regulator SarV | RAM46266.1 |
| HTP- type transcriptional regulator SarU | RAM46810.1 |
| HTP- type transcriptional regulator MgrA | RAM46890.1 |
| HTP-type transcriptional regulator| MarR(Rot) (Repressor of toxins Rot) | RAM45395.1 |
| Metal-dependent transcriptional regulator| | RAM46837.1 |
| AraC family transcriptional regulator| | RAM46871.1 |
| LysR family transcriptional regulator | RAM46876.1 |
| TetR/AcrR family transcriptional regulator | RAM46695.1 |
| TetR/AcrR family transcriptional regulator | RAM46731.1 |
| Sugar-binding transcriptional regulator DeoR | RAM46982.1 |
| [Helix-turn-helix transcriptional regulator](https://blast.ncbi.nlm.nih.gov/smartblast/smartBlast.cgi?QUERY=WP_000163544.1&CMD=Submit#alnHdr_HBC8622179) | RAM46996.1 |
| RNA polymerase sigma factor Sig B | RAM46417.1 |
| Anti-Sig B factor RsbW | RAM46416.1 |