**Supplementary tables**

**Table S1. Set of primers used for the polymerase chain reaction screening of non-fibronectin-collagen-T antigen (FCT) region-associated loci.**

|  |  |  |
| --- | --- | --- |
| **Gene** | **Primer sequence** | **Reference** |
| *speA* | 5'-ATGGAAACAATAAAAAG-3'  5'-TTACTTGGTTGTTAGGTAG-3' | (Matsumoto et al., 2003) |
| *speB* | 5'-TTCTAGGATACTCTACCAGC-3'  5'-ATTTGAGCAGTTGCAGTAGC-3' | (Stanley et al., 1996) |
| *speB-2* | 5’-GGATCCCAACCAGTTGTTAAATCTCT-3’ 5’-AACGTTCTAAGGTTTGATGCCTAC AA-3’ | (Chatellier et al., 2000) |
| *speC* | 5'-TCTAGTCCCTTCATTTGGTG-3'  5'-GTAAATTTTTCAACGACACA-3' | (Matsumoto et al., 2003) |
| *speH* | 5'-GTGAATGTCCAGGGAAAGG-3'  5'-GCATGCTATTAAAGTCTCCATTG-3' | (Matsumoto et al., 2003) |
| *speI* | 5'-AATGAAGGTCCGCCATTTTC-3'  5'-TCTCTCTGTCACCATGTCCTG-3' | (Matsumoto et al., 2003) |
| *speK* | 5'-GTGTGTCTAATGCCACCGTCT-3'  5'-GGAACATATATGCTCCTAGAT-3' | (Matsumoto et al., 2003) |
| *speL* | 5'-CAGCACCTTCCTCTTTCTCG-3'  5'-GGAAAAGAGGGACGCAAG-3' | (Matsumoto et al., 2003) |
| *speM* | 5'-GGATGAGTGAATAAATCGGTAA-3'  5'-AGTCGGGACGATGATAA-3' | (Matsumoto et al., 2003) |
| *smeZ* | 5'-CAATAATTTCTCGTCCTGTGTTTGGAT-3'  5'-GATAAGGCGTCATTCCACCATAG-3' | (Lintges et al., 2007) |
| *ssa* | 5'-TGATCAAATATTGCTCCAAGGTG-3'  5'-TCCACAGGTCAGCTTTTACAG-3' | (Suvorov et al., 2009) |
| *sdn* | 5'-AACGTTCAACAGGCGCTTAC-3'  5'-ACCCCATCGGAAGATAAAGC-3' | (Matsumoto et al., 2003) |
| *sla* | 5'-CTCTAATAGCATCGGCTACGC-3'  5'-AATGGAAAATGGCACTGAAAG-3' | (Matsumoto et al., 2003) |

**Table S2. Set of primers used for the polymerase chain reaction screening of fibronectin-collagen-T antigen (FCT) region-associated loci. PCR conditions are reported in** (Kratovac et al., 2007)

|  |  |  |
| --- | --- | --- |
| **Gene** | **Primer sequence** | **Fragment**  **(Kb)** |
| *prtF1-A* | 5'-TGCGCGGGTTCTATCGGTTTTGGTCAAGTA-3'  5'-AATTAGTTTTYTCARWGCYTCACGCATTAA-3' | 0.55 |
| *prtF1-B* | 5'-TGCGCGGGTTCTATCGGTTTTGGTCAAGTA-3'  5'-CTCCGTCTCACCAGACTCACCCGCTAGAGGTGATTGGTC-3' | 1.2 |
| *cpa-A* | 5' -GGATATGAGATTGCCGAACCTATTACTTTTAAAG-3'  5'-GGAGCCTGTTTATCTTCCATTCGAATAATATCCAC-3' | 0.75 |
| *cpa-B* | 5'-GAAGGTGACTACTCTAAACTTCTAGAGGGAGCAAC-3'  5'-CCAGTTGGTGGGACAAGATCTTTWCGG-3' | 1.3 |
| *prtF2-A* | 5'-GCTGGTGCAACTATGGAGTTGCGTGATTCATCTGGT-3'  5'-CCAGTTGCTGGTAAACTAGTATTACTCTTTGGC-3' | 0.60 |
| *prtF2-B* | 5'-TGCGCGGGTTCTATCGGTTTTGGTCAAGTA-3'  5'-CCCTGGTTATACTGGTTGGAGTCCTTCTCTAG-3' | 1.2 |
| *sipA2* | 5'-GCTTTCATACGGTTAGTACTTAAGATTTCTATTATTGG-3'  5'-CCTCTCACTCTTAATAGAGTTGAGATTTTCCC-3' | 0.46 |
| *fctA* | 5'-AAATTATTACTTGCTACTGCAATCTTAGCAACTGC-3'  5'-CTCCACCAATAGCCACAATGCTAAGAACTGCAAATGGGC-3' | 1.0 |
| *fctB* | 5'-ATGTTATTTTCTGTCGTAATGATATTAACC-3'  5'-CTAGTAACCCCAGTAATACGATACTTAAGATACCC-3' | 1.3 |
| *srtC2* | 5'-GATGACAATTGTACAGGTTATCAATAAAGCC-3'  5'-CTTGAATAGTACCGACAACGATAACACGATTGTCAG-3' | 0.72 |
| *sof* | 5'-GTATAAACTTAGAAAGTTATCTGTAGG-3'  5'-GGCCATAACATCGGCACCTTCGTCAATT-3' | 0.65 |
| *sipA-srtC2* | 5'-GGGAAAATCTCAACTCTATTAAGAGTGAGAGG-3'  5'-GGCTTTATTGATAACCTGTACAATTGTCATC-3' | 1.3 |
| *srtB* | 5'-ATGGAGGAGGTGTGGCAAAAGGCTAAGGCG-3'  5'-CTAAATAATAGCTATAACCACCCCGAAAGCAGC-3' | 0.74 |

**Table S3. Genotypes defined by the profile of non-fibronectin-collagen-T antigen (FCT) region-associated virulence genes and their association with the *emm* type.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Genotype** | **no. of strains** | ***emm1*** | ***emm4*** | ***emm6*** | ***emm89*** | ***speC*** | ***speA*** | ***ssa*** | ***sdn*** | ***sla*** | ***speK*** | ***speH*** | ***speI*** | ***speL*** | ***speM*** | ***speB*** | ***smeZ*** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| G1 | 1 | 1 | 0 | 0 | 0 | + | + | − | − | − | − | − | − | − | − | + | + |
| G2 | 1 | 1 | 0 | 0 | 0 | + | + | − | − | − | − | − | − | − | + | + | + |
| G3 | 1 | 1 | 0 | 0 | 0 | − | − | − | − | − | − | − | − | − | − | + | + |
| G4 | 1 | 1 | 0 | 0 | 0 | − | + | + | − | − | − | − | − | − | + | + | − |
| G5 | 3 | 3 | 0 | 0 | 0 | − | − | − | − | − | − | − | − | − | − | + | − |
| G6 | 1 | 1 | 0 | 0 | 0 | − | − | − | − | − | + | − | − | − | − | + | − |
| G7 | 4 | 4 | 0 | 0 | 0 | − | + | − | − | − | − | − | − | − | − | + | − |
| G8 | 1 | 1 | 0 | 0 | 0 | − | − | − | − | − | − | − | − | − | − | + | + |
| G9 | 1 | 1 | 0 | 0 | 0 | − | − | − | + | − | − | − | − | − | − | + | − |
| G10 | 1 | 1 | 0 | 0 | 0 | − | + | − | + | − | − | − | − | − | − | + | + |
| G11 | 1 | 1 | 0 | 0 | 0 | − | − | + | − | − | − | + | − | − | − | + | − |
| G12 | 1 | 1 | 0 | 0 | 0 | − | + | − | − | − | − | − | − | − | − | + | + |
| G13 | 1 | 1 | 0 | 0 | 0 | − | + | − | − | − | − | − | + | − | − | + | + |
| G14 | 1 | 1 | 0 | 0 | 0 | + | − | − | − | − | − | − | + | − | − | + | − |
| G15 | 1 | 0 | 1 | 0 | 0 | − | − | − | + | − | − | − | − | − | − | + | − |
| G16 | 2 | 0 | 2 | 0 | 0 | + | + | + | + | − | − | − | − | − | − | + | + |
| G17 | 1 | 0 | 1 | 0 | 0 | + | − | − | + | − | − | − | − | − | − | + | + |
| G18 | 1 | 0 | 1 | 0 | 0 | − | + | − | − | − | − | − | − | + | − | + | + |
| G19 | 1 | 0 | 1 | 0 | 0 | + | − | + | − | − | − | − | − | − | − | + | − |
| G20 | 1 | 0 | 1 | 0 | 0 | − | − | + | + | − | − | − | − | − | − | + | − |
| G21 | 1 | 0 | 1 | 0 | 0 | − | − | + | + | − | − | − | − | − | + | + | − |
| G22 | 1 | 0 | 1 | 0 | 0 | + | − | + | + | + | − | − | − | − | − | + | + |
| G23 | 1 | 0 | 1 | 0 | 0 | + | − | + | + | − | − | − | − | + | + | + | + |
| G24 | 1 | 0 | 1 | 0 | 0 | + | − | + | − | − | − | + | − | − | − | + | + |
| G25 | 3 | 0 | 2 | 0 | 1 | + | − | + | − | − | − | − | − | − | − | + | + |
| G26 | 1 | 0 | 1 | 0 | 0 | + | − | − | − | − | − | + | + | − | − | + | − |
| G27 | 1 | 0 | 0 | 1 | 0 | + | − | − | − | − | − | + | − | − | − | + | − |
| G28 | 1 | 0 | 0 | 1 | 0 | − | − | − | − | + | + | + | − | − | − | + | − |
| G29 | 1 | 0 | 0 | 1 | 0 | + | − | − | − | + | − | + | + | − | − | + | − |
| G30 | 1 | 0 | 0 | 1 | 0 | + | − | − | − | + | + | + | + | − | − | + | − |
| G31 | 1 | 0 | 0 | 1 | 0 | − | − | − | + | + | − | + | − | − | − | + | − |
| G32 | 1 | 0 | 0 | 1 | 0 | − | − | − | + | − | − | − | − | − | − | + | + |
| G33 | 1 | 0 | 0 | 1 | 0 | + | + | − | + | + | + | + | + | − | − | + | − |
| G34 | 1 | 0 | 0 | 1 | 0 | + | − | − | − | + | − | + | − | − | − | + | − |
| G35 | 2 | 0 | 0 | 2 | 0 | + | − | − | − | + | + | + | − | − | − | + | − |
| G36 | 1 | 0 | 0 | 1 | 0 | − | + | − | − | + | + | + | + | − | − | + | − |
| G37 | 1 | 0 | 0 | 1 | 0 | − | + | − | + | + | + | + | − | − | − | + | − |
| G38 | 5 | 0 | 0 | 0 | 5 | + | − | − | − | − | − | − | − | − | − | + | − |
| G39 | 6 | 0 | 0 | 0 | 6 | − | − | − | − | − | − | − | − | − | − | + | − |
| G40 | 1 | 0 | 0 | 0 | 1 | − | − | − | − | − | − | − | − | + | − | + | − |

**References in Supplementary tables**

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