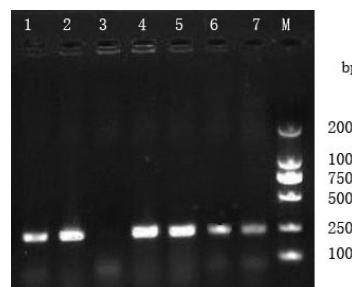


## Supplementary Materials:

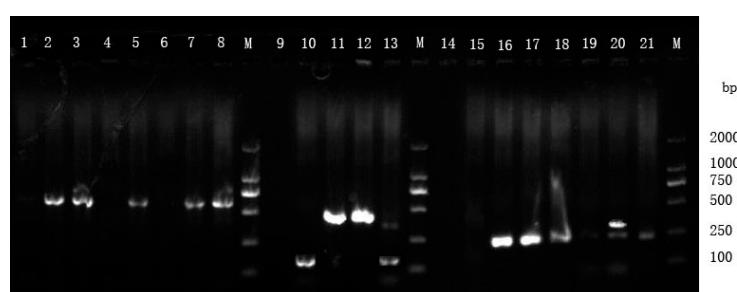
**Table 1.** Primers used in this study.

Primer name	Primer sequence (5'-3')	Fragment size (bp)	Annealing temperature (°C)	Reference
<i>fnbA</i>	GATACAAACCCAGGTGGTGG TGTGCTTGACCATGCTCTTC	191	52	Zmantar et al., 2008
<i>fnbB</i>	ACGCTCAAGGCACGGCAAAG ACCTTCTGCATGACCTTCTGCACCT	197	62	Pereyra et al., 2016
<i>clfB</i>	TGCAAGTGCAGATTCCGAAAAAAC CCGTCGGTTGAGGTGTTCATTTG	194	62	Klein et al., 2012
<i>cna</i>	AAAGCGTTGCCTAGTGGAGAC AGTGCCTTCCCAAACCTTT	192	54	Zmantar et al., 2008
<i>bap</i>	CCCTATATCGAAGGTGTAGAATTG GCTGTTGAAGTTAATACTGTACCTGC	971	60	Darwish and Asfour, 2013
<i>icaA</i>	CCTAACTAACGAAAGGTAG AAGATATAGCGATAAGTGC	1351	49	Wang et al., 2018
<i>icaD</i>	AAACGTAAGAGAGGGTGG GGCAATATGATCAAGATAC	381	49	Pereyra et al., 2016
<i>sea</i>	CCTTGAAACGGTAAAACG TCTGAACCTTCCCATCAAAAAC	127	55	Bayles, K, et al., 1998
<i>seb</i>	TCGCATCAAAC TGACAACG GCAGGTACTCTATAAGTGCCTGC	477	53	Bayles, K, et al., 1998
<i>sec</i>	AGATTACCAAGAACTACAAAGATG AAGGTGGACTTCTATCTTCACACTT	490	63	Sergeev, et al., 2004
<i>sed</i>	GAGGTGTCACTCCACACGAA TGAAGGTGCTCTGTGGATAATG	349	57	Avanish K et al., 2009
<i>see</i>	ACCGATTGACCGAAGAAAAAA ATTGCCCTTGAGCATCAAAC	264	51	Avanish K et al., 2009
<i>seg</i>	AGAATTAGCTAACATTATAAGATAA AAAAG	496	60	Sergeev, et al., 2004
<i>seh</i>	TCAGTGAGTATTAAGAAATACTTCCAT TGATTTAGCTCAGAAGTTAAAAATAA AAATG	466	62	Sergeev, et al., 2004
<i>sei</i>	TTCTTAGTATAGATTACATCAATAT			
<i>sei</i>	TGGAACAGGACAAGCTGAAA TGTTTGCCATTAACCCAAAG	529	51	Avanish K et al., 2009
<i>sej</i>	ATGAAAAAAACAATATTATACTGATT TCTCCC	807	57	Sergeev, et al., 2004

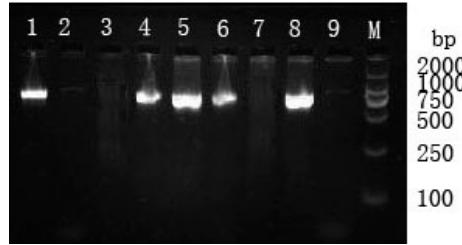
	TCTACAGAACCAAAGGTAGACTTATTA			
	ATAC			
sek	ATGAATCTTATGATTTAATTTCAGAAC	545	60	Sergeev, et al.,2004
	AA			
	ATTATATCGTTCTTATAAGAAATATC			
sel	ATGAAAAAAAGATTATTATTTGTAATTG	723	60	Sergeev, et al.,2004
	TTATTAC			
	ATCATCTTTGAAATTCGACATCTAG			
sem	ATGAAAAGAATACTTATCATTGTTGTT	258	60	Sergeev, et al.,2004
	TATTG			
	CTTCAACTTCGTCCCTATAAGATATTG			
	ATAAAAAAATATTAAAAAGCTTATGAGA			
sen	TTGTTC	777	60	Sergeev, et al.,2004
	ACTTAATCTTATATAAAAATACATCAA			
	TATG			
seo	TATGTAGTGTAAACAATGCATATGCA	685	58	Sergeev, et al.,2004
	TCTATTGTTTATTATCATTATAAATTG			
	CAAAT			
seq	GGAAAATACACTTATATTCACAGTTTC	539	60	Sergeev, et al.,2004
	ATTTATTCAAGTTCTCATATGAAATCTC			
ser	AGCGGTAATAGCAGAAAATG	363	51	Holtfreter, et al., 2007
	TCTTGTACCGTAACCGTTT			
seu	AATGGCTCTAAAATTGATGG	215	49	Holtfreter, et al., 2007
	ATTGATTCCATCATGCTC			
tsst	AAGCCCTTGTGCTTGCG	447	53	Bayles, K, et al.,1998
	ATCGAACTTGGCCCATACTTT			



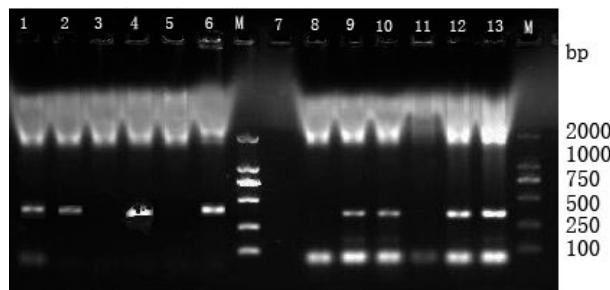
**Figure 1.** PCR amplification for the detection of *fnbA*, *fnbB* and *clfB* gene of *S. aureus* isolates. M: DL2000 marker; 1-3: PCR verification of *fnbA* gene with 191 bp, Line 1-3: different isolates from raw goat milk; 4-5: PCR verification of *fnbB* gene with 197 bp, Line 4-5: different isolates from raw goat milk; 6-7: PCR verification of *clfB* gene with 194 bp, Line 6-7: different isolates from raw goat milk.



**Figure 2.** PCR amplification for the detection of *seo*, *sek*, *sei*, *seb*, *sea*, *cna*, *seu* and *see* genes of *S. aureus* isolates. M: DL2000 marker; 1-2: PCR verification of *seo* gene with 685 bp, Line 1-2: different isolates from raw goat milk; 3-4: PCR verification of *sek* gene with 545 bp, Line 3-4: different isolates from raw goat milk; 5-8: PCR verification of *sei* gene with 529 bp, Line 5-8: different isolates from raw goat; 9-10: PCR verification of *sea* gene with 127 bp, Line 9-10: different isolates from raw goat; 11-13: PCR verification of *seb* gene with 477 bp, Line 11-13: different isolates from raw goat; 14-15: PCR verification of *cna* gene with 192 bp, Line 14-15: different isolates from raw goat; 16-18: PCR verification of *seu* gene with 215 bp, Line 16-18: different isolates from raw goat; 19-20: PCR verification of *see* gene with 264 bp, Line 19-20: different isolates from raw goat.



**Figure 3.** PCR amplification for the detection of *bap*, *sej* and *sen* genes of *S. aureus* isolates. M: DL2000 marker; 1-2: PCR verification of *bap* gene with 971 bp, Line 1-2: different isolates from raw goat; 3-4: PCR verification of *sej* gene with 807 bp, Line 3-4: different isolates from raw goat; 5-9: PCR verification of *bap* gene with 777 bp, Line 5-9: different isolates from raw goat.



**Figure 4.** PCR amplification for the detection of *sec*, *seh*, *seg*, *tsst* and *ser* genes of *S. aureus* isolates. M: DL2000 marker; 1-2: PCR verification of *sec* gene with 490 bp, Line 1-2: different isolates from raw goat; 3-4: PCR verification of *seh* gene with 466 bp, Line 3-4: different isolates from raw goat; 5-7: PCR verification of *seg* gene with 486 bp, Line 5-7: different isolates from raw goat; 8-10: PCR verification of *ser* gene with 363 bp, Line 11-12: different isolates from raw goat.



**Figure 5.** PCR amplification for the detection of *sel*, *sed*, *icaD*, *seq* and *sem* gene of *S. aureus* isolates. M: DL2000 marker; 1-2: PCR amplification of *sel* gene with 723 bp, Line 1-2: different isolates from raw goat; 3-5: PCR verification of *sed* gene with 349 bp, Line 3-5: different isolates from raw goat; 6-8: PCR verification of *icaD* gene with 381 bp, Line 6-8: different isolates from raw goat; 9-12: PCR verification of *seq* gene with 539 bp, Line 9-12: different isolates from raw goat; 13-16: PCR verification of *sem* gene with 258 bp, Line 13-16: different isolates from raw goat.