

Appendix 1. The List of Primers Used in this Study

Target gene	Primer sequences (5' → 3')	Amplicon size (bp)	PCR condition			Reference
<i>nucA</i>	F: 5'-AGTTCAGCAAATGCATCACA-3' R: 5'-TAGCCAAGCCTTGACGAACT-3'	400	94°C	5 min	1 cycle	(18)
			94°C	45 s	30 cycles	
			62°C	45 s		
			72°C	90 s		
<i>icaA</i>	F: 5'-ACACTTGCTGGCGCAGTCAA-3' R: 5'-TCTGGAACCAACATCCAACA-3'	188	95°C	10 min	1 cycle	(19)
			94°C	1 min	25 cycles	
			55°C	1 min		
			72°C	1 min		
<i>icaD</i>	F: 5'-ATGGTCAAGCCCAGACAGAG-3' R: 5'-AGTATTTTCAATGTTTAAAGCAA-3'	198	95°C	10 min	1 cycle	(19)
			94°C	1 min	25 cycles	
			55°C	1 min		
			72°C	1 min		
<i>cna</i>	F: 5'-AAAGCGTTGCCTAGTGGAGA-3' R: 5'-AGTGCCTTCCCAAACCTTTT-3'	192	95°C	10 min	1 cycle	(19)
			94°C	1 min	25 cycles	
			55°C	1 min		
			72°C	1 min		

<i>fnbA</i>	F: 5'-CATAAATTGGGAGCAGCATCA-3' R: 5'-ATCAGCAGCTGAATTCCCATT-3'	128	95°C	10 min	1 cycle	(19)
			94°C	1 min	25 cycles	
			55°C	1 min		
			72°C	1 min		
<i>clfA</i>	F: 5'- ATTGGCGTGGCTTCAGTGCT-3' R: CGTTTCTTCCGTAGTTGCATTTG-3'	292	95°C	10 min	1 cycle	(19)
			94°C	1 min	25 cycles	
			55°C	1 min		
			72°C	1 min		
<i>agr I</i>	F: 5'-ATGCACATGGTGCACATGC-3' R: 5'-GTCACAAGTACTATAAGCTGCGAT-3'	441	95°C	10 min	1 cycle	(19)
			95°C	30 s	25 cycles	
			60°C	1 min		
			72°C	1 min		
<i>agr II</i>	F: 5'- ATGCACATGGTGCACATGC-3' R: 5'-TATTACAAATTGAAAAGTGGCCATAGC- 3'	575	95°C	10 min	1 cycle	(19)
			95°C	30 s	25 cycles	
			60°C	1 min		
			72°C	1 min		
<i>agr III</i>	F: 5'-ATGCACATGGTGCACATGC-3' R: 5'- GTAATGTAATAGCTTGTATAATAATACCCAG- 3'	323	95°C	10 min	1 cycle	(19)
			95°C	30 s	25 cycles	
			60°C	1 min		
			72°C	1 min		
<i>agr IV</i>	F: 5'-ATGCACATGGTGCACATGC-3' R: 5'-CGATAATGCCGTAATACCCG-3'	659	95°C	10 min	1 cycle	(19)
			95°C	30 s		

			60°C	1 min	25	
			72°C	1 min	cycles	
<i>mecA</i>	F: 5'-GTAGAAATGACTGAACGTCCGATAA-3' R: 5'-CCAATTCACATTGTTTCGGTCTAA-3'	310	94°C	4 min	1 cycle	(18)
			94°C	45 s	30 cycles	
			50°C	45 s		
			72°C	2 min		
<i>SCCmec</i> Type I	F: 5'-GCTTTAAAGAGTGTCGTTACAGG-3' R: 5'-GTTCTCTCATAGTATGACGTCC-3'	613	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		
<i>SCCmec</i> Type II	F: 5'-GGTTGAAGATGATGAAGCG-3' R: 5'-GCAAATCAATGGTTAATGGACC-3'	398	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		
<i>SCCmec</i> Type III	F: 5'-CCATATTGTGTACGATGCG-3' R: 5'-CCTTAGTTGTCGTAACAGATCG -3'	280	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		

<i>SCCmec</i> Type Iva	F: 5'-GCCTTATTCGAAGAAACCG-3' R: 5'-CTACTCTTCTGAAAAGCGTCG-3'	776	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		
<i>SCCmec</i> Type IVb	F: 5'-TCTGGAATTACTTCAGCTGC-3' R: 5'-AAACAATATTGCTCTCCCTC-3'	493	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		
<i>SCCmec</i> Type IVc	F: 5'-ACAATATTTGTATTATCGGAGAGC-3' R: 5'-TTGGTATGAGGTATTGCTGG-3'	200	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		
<i>SCCmec</i> Type IVd	F: 5'-CTCAAAATACGGACCCCAATACA-3' R: 5'-TGCTCCAGTAATTGCTAAAG-3'	881	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		
<i>SCCmec</i> Type V	F: 5'-GAACATTGTTACTTAAATGAGCG-3' R: 5'-TGAAAGTTGTACCCTTGACACC-3'	325	94°C	5 min	1 cycle	(21)
			94°C	45 s	25 cycles	
			55°C	45 s		
			72°C	90 s		

<i>aac(6')-Ie-aph(2'')-Ia</i>	F: 5'-CAGAGCCTTGGGAAGATGAAG-3' R: 5'-CCTCGTGTAATTCATGTTCTGGC-3'	348	94°C	3 min	1 cycle	(20)
			94°C	40 s	30 cycles	
			55°C	40 s		
			72°C	40 s		
<i>ant(6)-Ia</i>	F: 5'-AATTGTGACCCTTGAGGG -3' R: 5'-GGCATATGTGCTATCCAG -3'	814	94°C	3 min	1 cycle	(20)
			94°C	1 min	35 cycles	
			54°C	1 min		
			72°C	1 min		
<i>aph(3')-IIIa</i>	F: 5'-CCGCTGCGTAAAAGATAC -3' R: 5'-GTCATACCACTTGTCCGC -3'	609	94°C	3 min	1 cycle	(20)
			94°C	1 min	35 cycles	
			57°C	1 min		
			72°C	1 min		
<i>grlA</i>	F: 5'-ACTTGAAGATGTTTTAGGTGAT -3' R: 5'-TTAGGAAATCTTGATGGCAA -3	380	94°C	10 min	1 cycle	(12)
			94°C	20 s	25 cycles	
			55°C	20 s		
			72°C	50 s		
<i>grlB</i>	F: 5'-CGATTAAGCACAACAAGCAAG -3' R: 5'-CATCAGTCATAATAATTACTC -3	375	94°C	10 min	1 cycle	(12)
			94°C	20 s	25 cycles	
			55°C	20 s		
			72°C	50 s		
<i>gyrA</i>	F: 5'-AATGAACAAGGTATGACACC -3' R: 5'-TACGCGCTTCAGTATAACGC -3	233	94°C	10 min	1 cycle	(12)
			94°C	20 s	25 cycles	
			55°C	20 s		

			72°C	50 s		
<i>gyrB</i>	F: 5'-CAGCGTTAGATGTAGCAAGC -3' R: 5'- CCGATTCCTGTACCAAATGC -3	249	94°C	10 min	1 cycle	(12)
			94°C	20 s	25 cycles	
			55°C	20 s		
			72°C	50 s		

Appendix 2. PhP Typing of *S. aureus* Strains Isolated from Patients with UTI.

File: 1.ad No. of tests: 24 Method: U ID level: 0.975 Date: 1/23/2022
Samples: 78 Co-phenetic corr: 0.877 DI: 0.807 (True DI: 0.806)

