

Association of antibacterial susceptibility profile with the prevalence of genes encoding efflux proteins in the Bangladeshi clinical isolates of *Staphylococcus aureus*

Tanjina Akter Suma,^{1,†} Nushrat Alam,^{1,†} Sheikh Zahir Raihan,^{1*} Md. Al Zahid,² Shankar C. Mandal², Fahrin Jahan Suchana,¹ Ripa Kundu,¹ Anwar Hossain,² Md. Abdul Muhit^{1*}

¹ *Department of Clinical Pharmacy and Pharmacology, Faculty of Pharmacy, University of Dhaka, Dhaka 1000, Bangladesh*

² *Department of Fisheries, University of Dhaka, Dhaka 1000, Bangladesh*

[†] *These authors contributed equally to this work*

* Author for Correspondence: **Dr. Md. Abdul Muhit**

Professor

Department of Clinical Pharmacy and Pharmacology

University of Dhaka, Bangladesh

E-mail: muhit@du.ac.bd

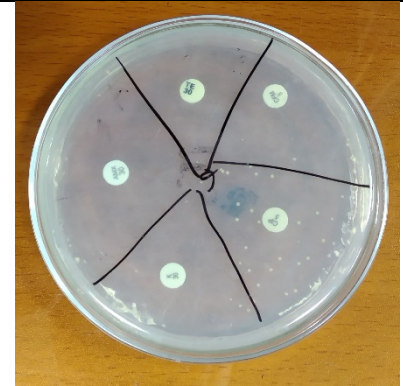
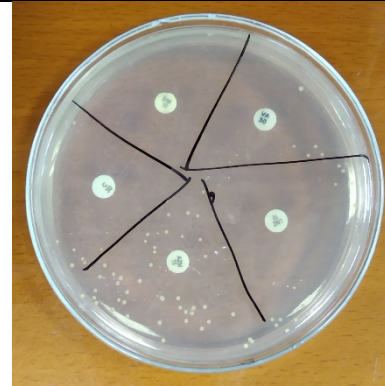
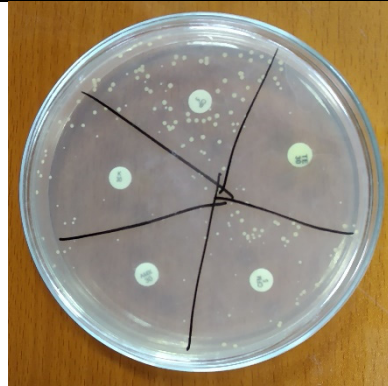
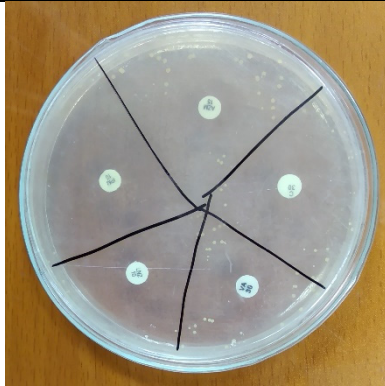
Phone: +88-01733-982854

Contents

1. <i>Susceptibility Profiles of all Staphylococcus aureus bacteria:</i>	3
2. <i>Gel doc images of all genes</i>	18

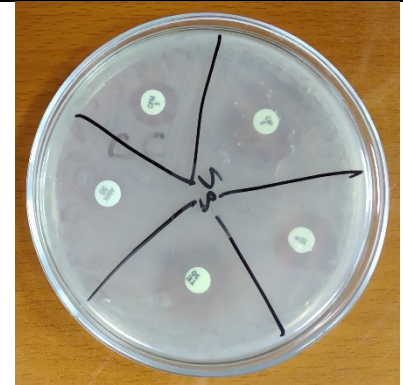
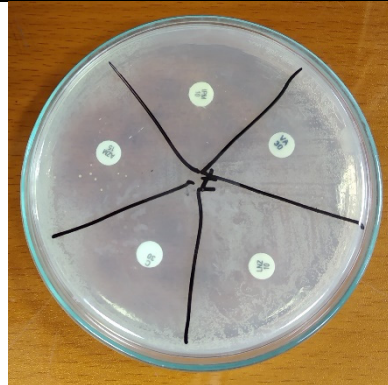
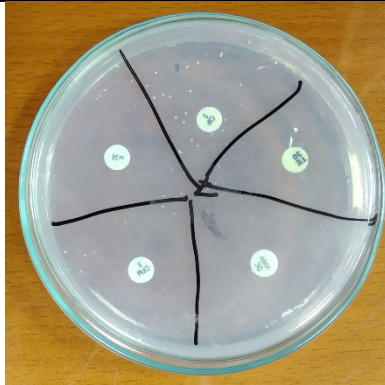
1. Susceptibility Profiles of all Staphylococcus aureus bacteria:

Sample: 01		Sample: 02	
Sample: 03		Sample: 04	



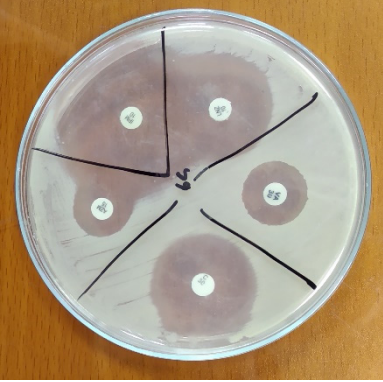

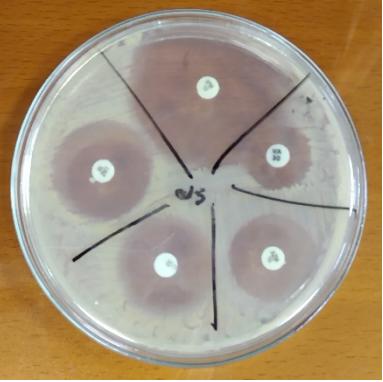
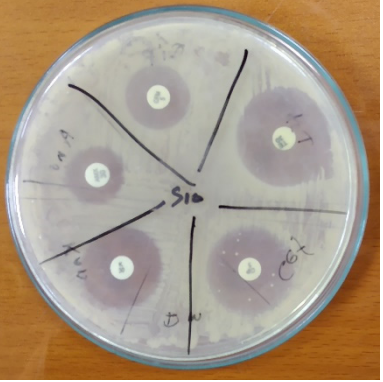
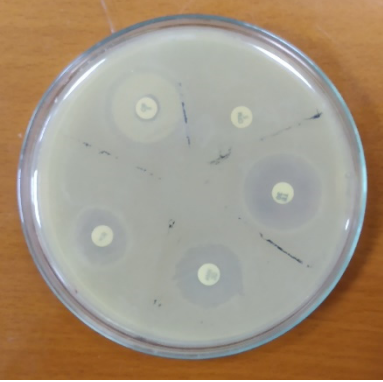
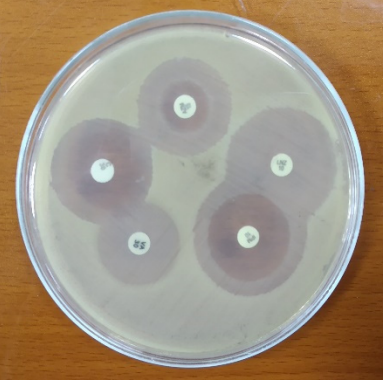
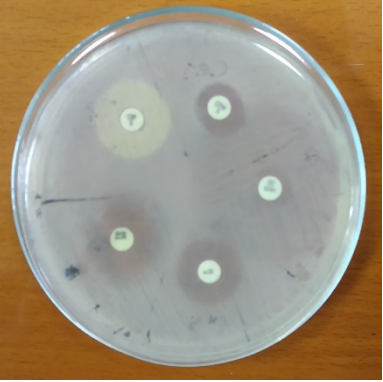
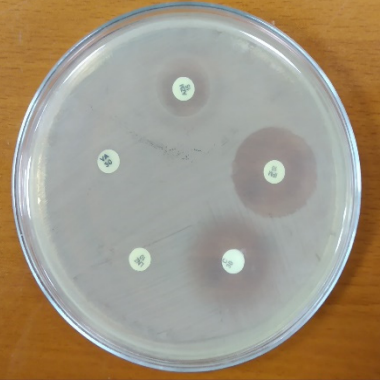
Sample: 05

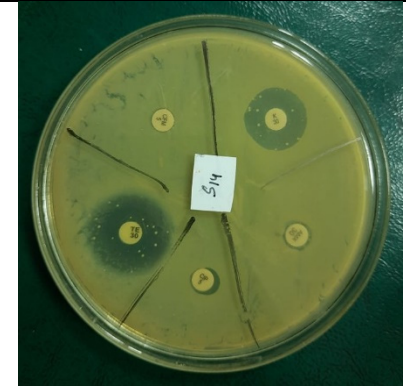
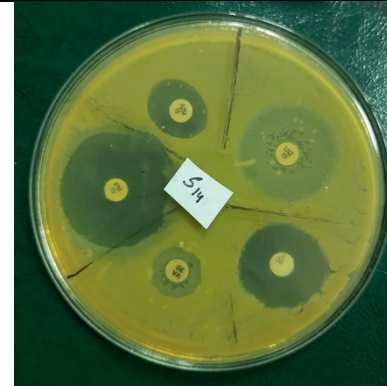
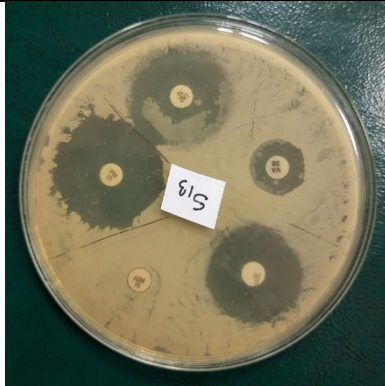
Sample: 06



Sample: 07

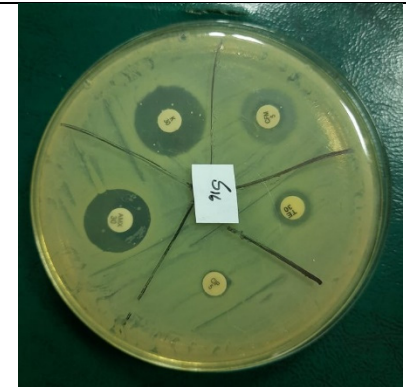
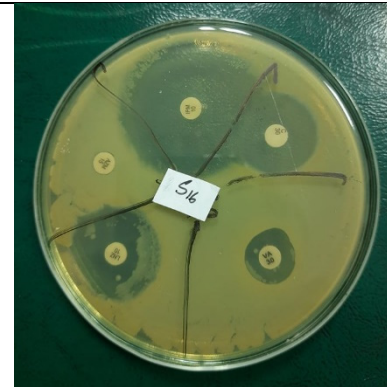
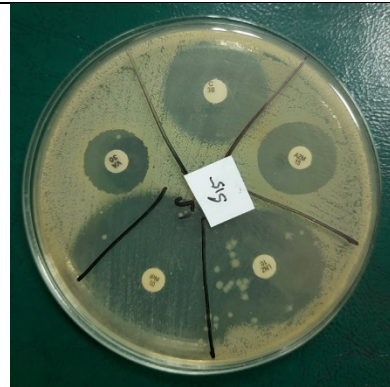
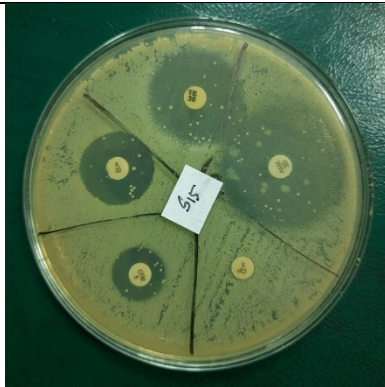
Sample: 08

			
<p>Sample: 09</p>		<p>Sample: 10</p>	
			
<p>Sample: 11</p>		<p>Sample: 12</p>	



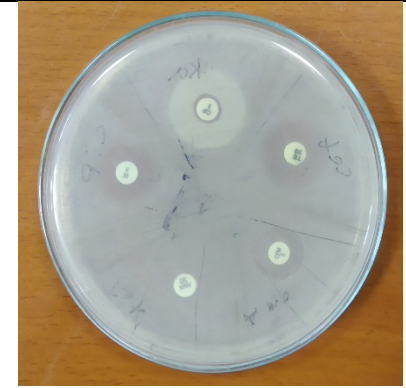
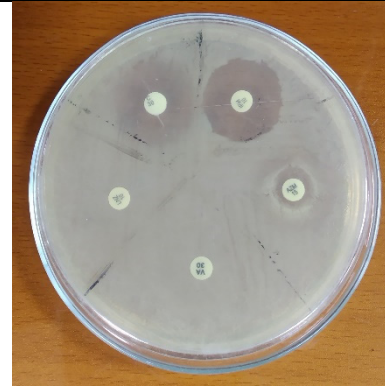
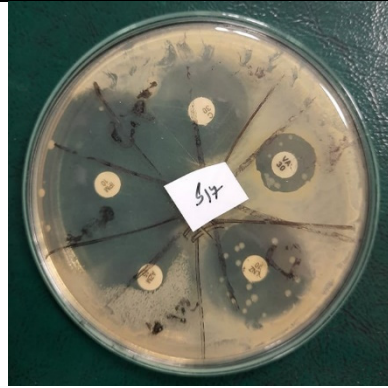
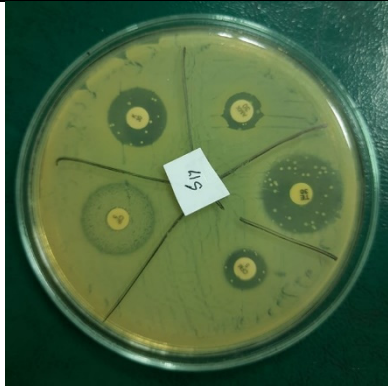
Sample: 13

Sample: 14



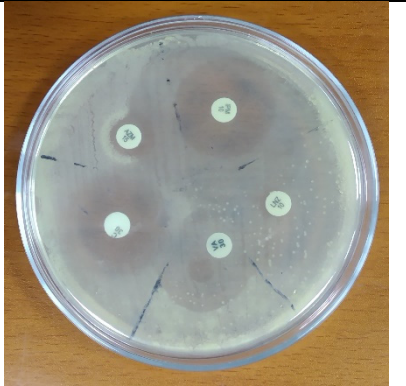
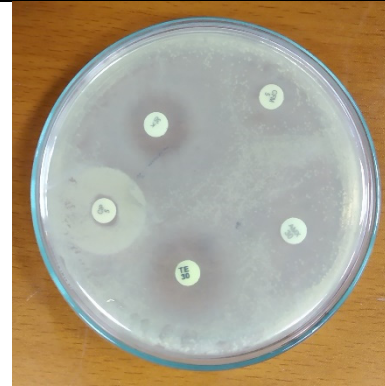
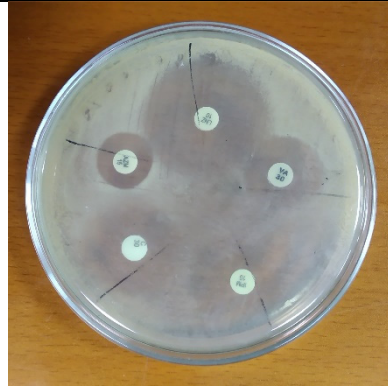
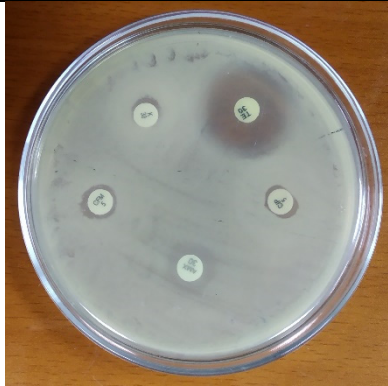
Sample: 15

Sample: 16



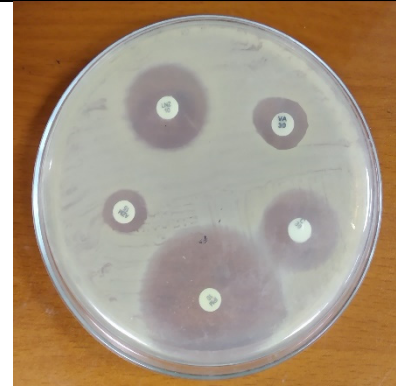
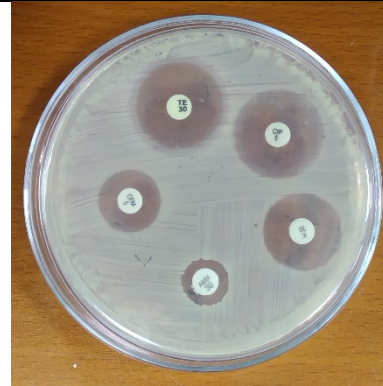
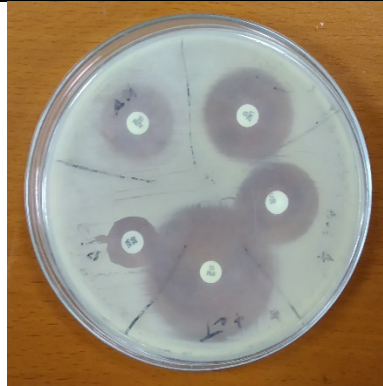
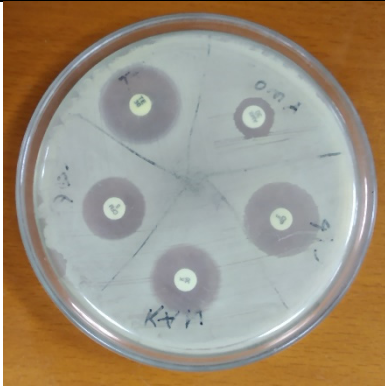
Sample: 17

Sample: 18



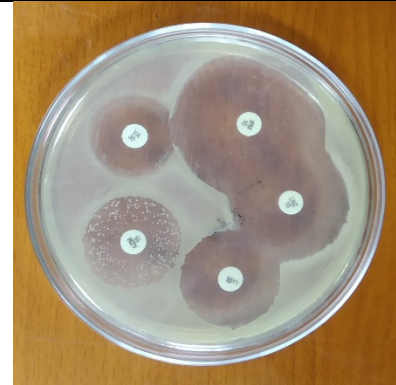
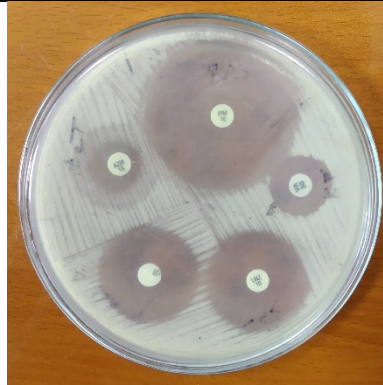
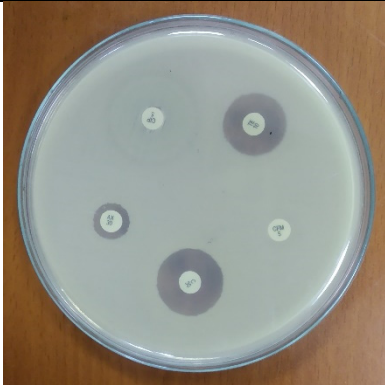
Sample: 19

Sample: 20



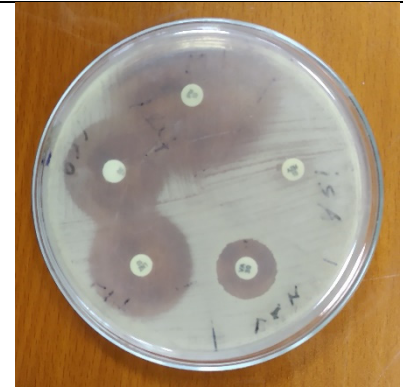
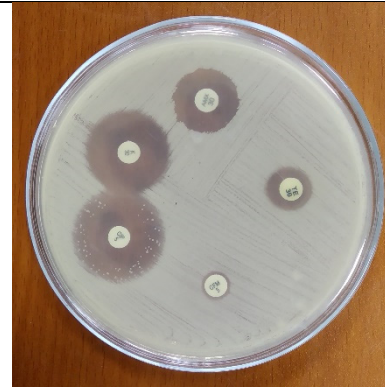
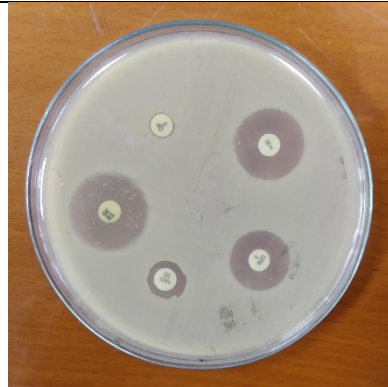
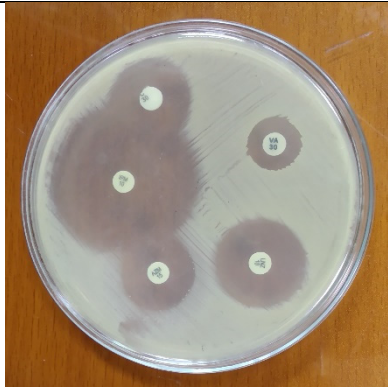
Sample: 21

Sample: 22



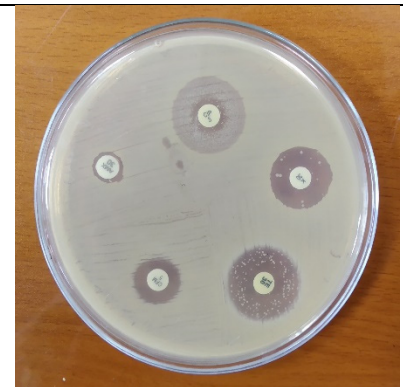
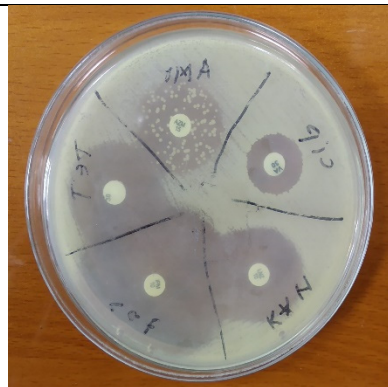
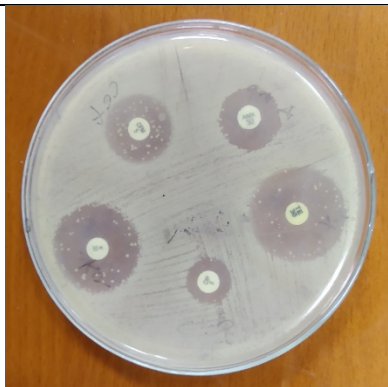
Sample: 23

Sample: 24



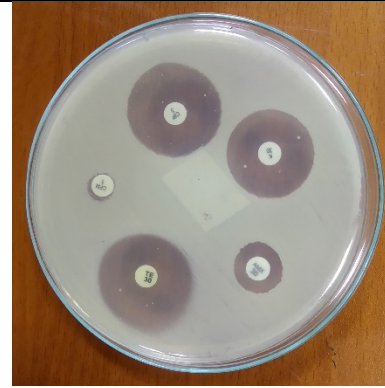
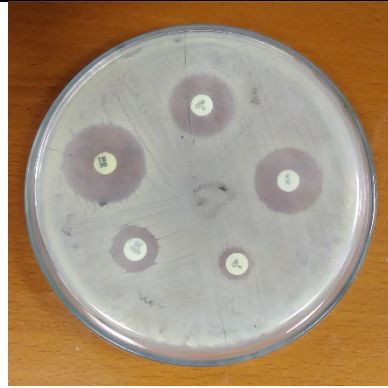
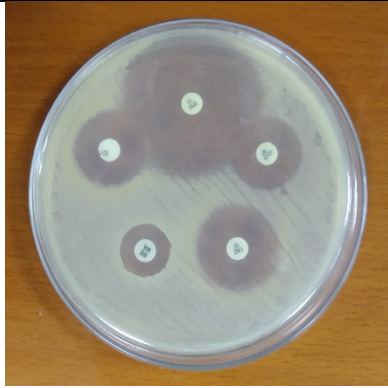
Sample: 25

Sample: 26



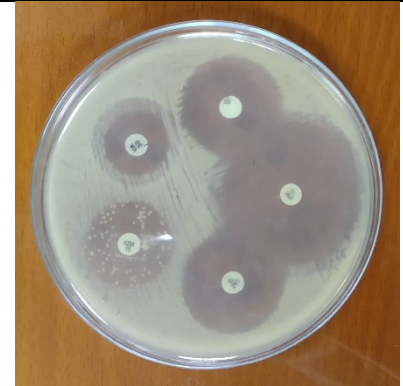
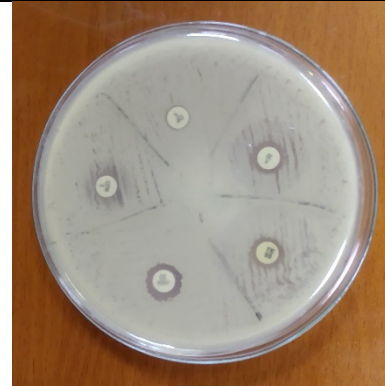
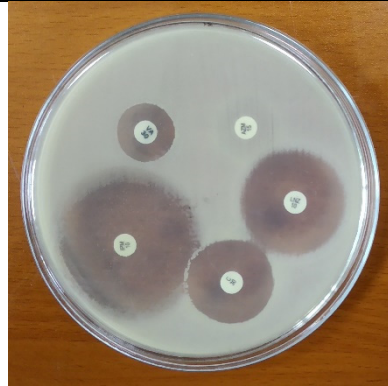
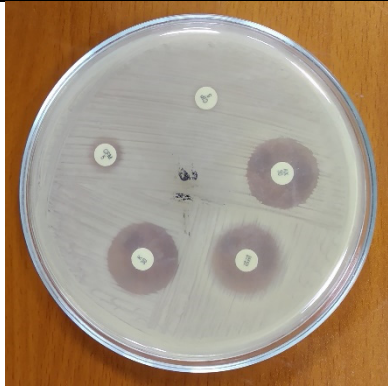
Sample: 27

Sample: 28



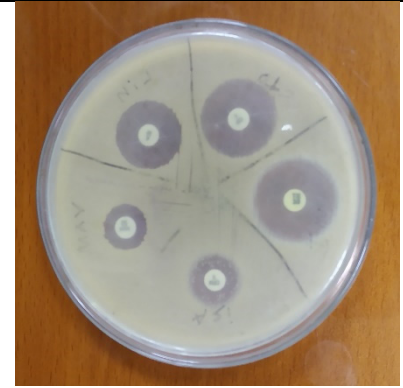
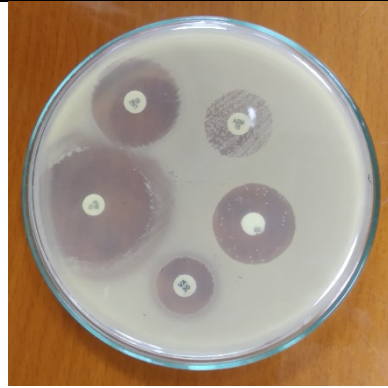
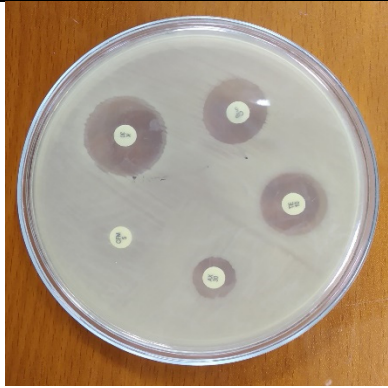
Sample: 29

Sample: 30



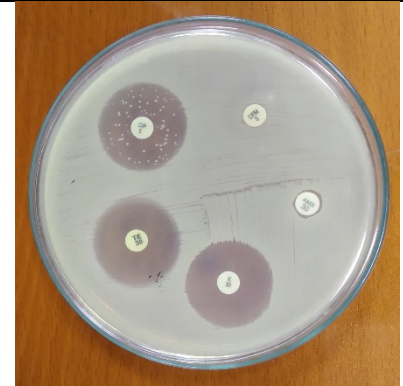
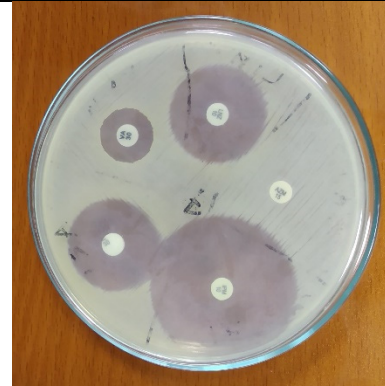
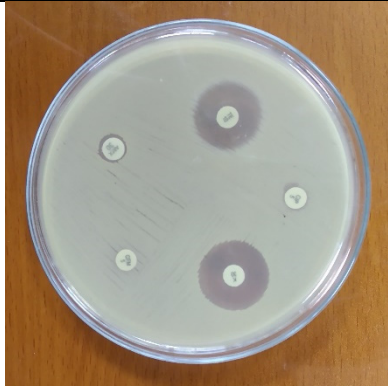
Sample: 31

Sample: 32



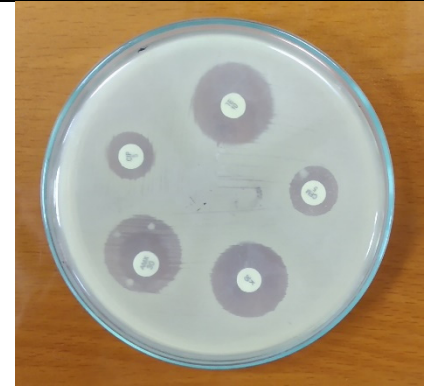
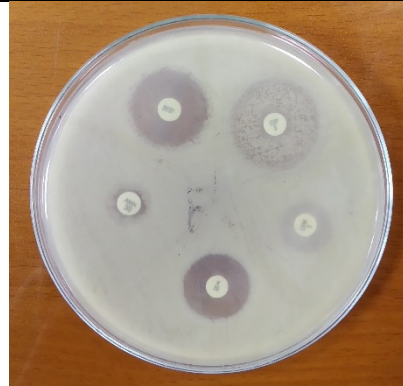
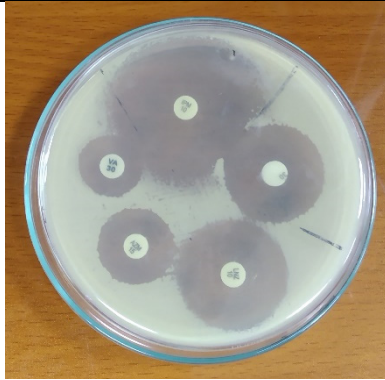
Sample: 33

Sample: 34



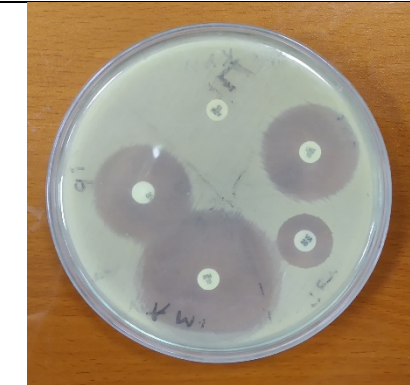
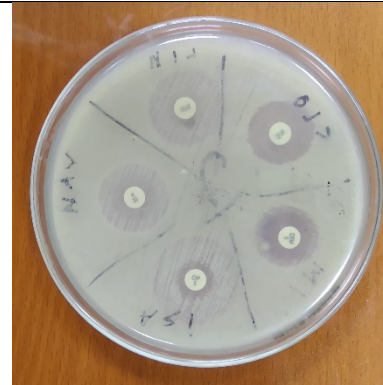
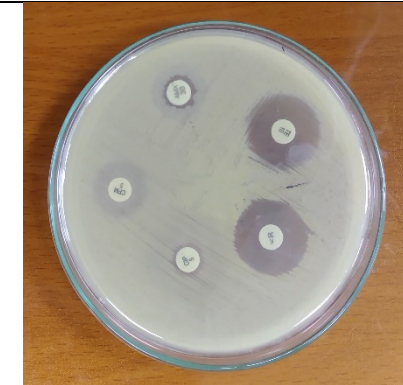
Sample: 35

Sample: 36



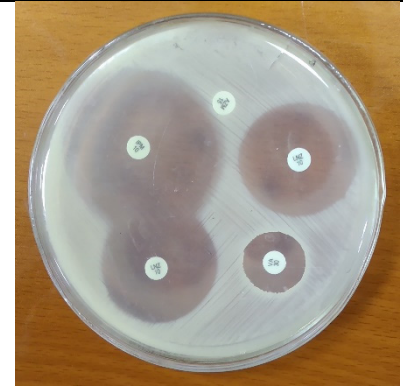
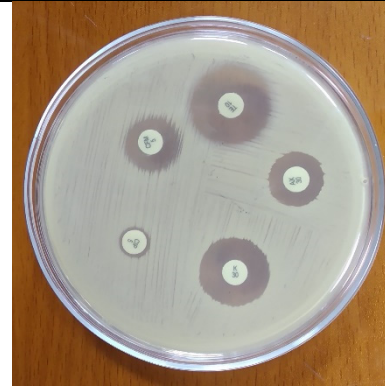
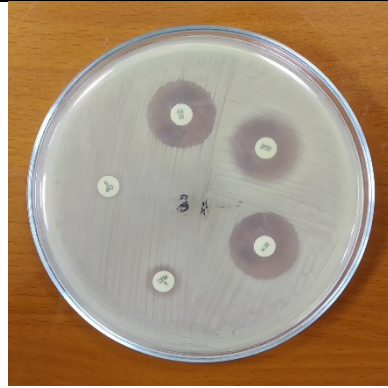
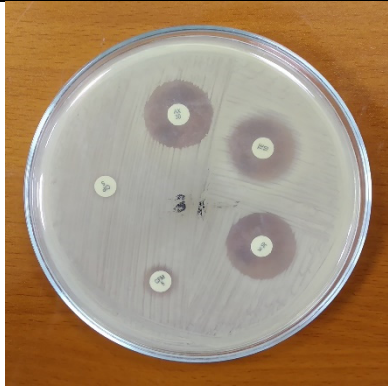
Sample: 37

Sample: 38



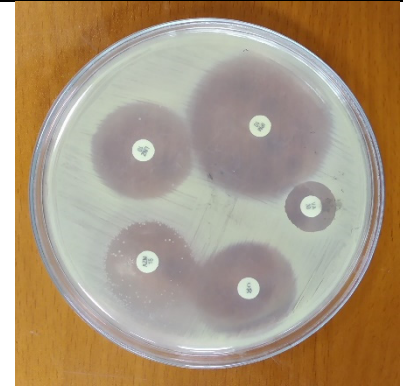
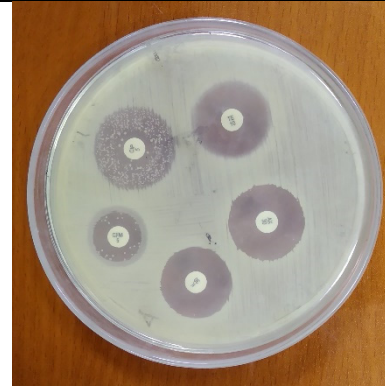
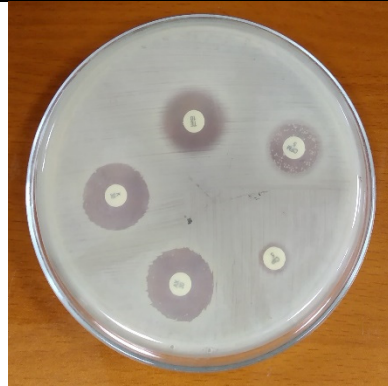
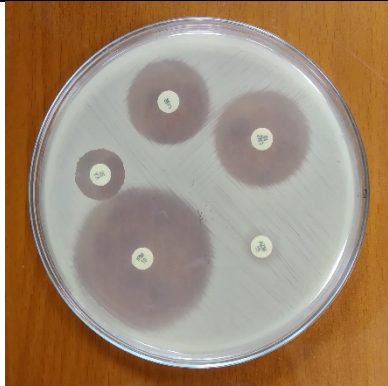
Sample: 39

Sample: 40



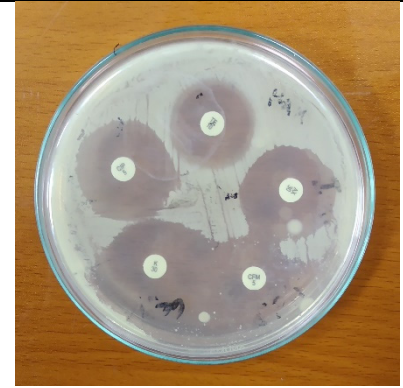
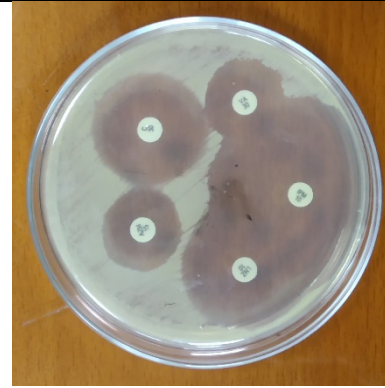
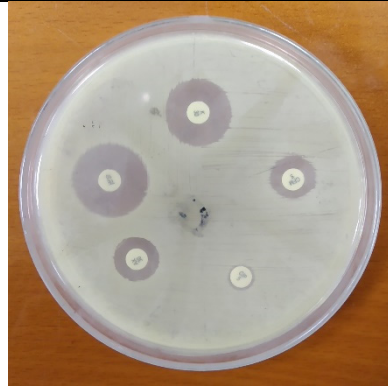
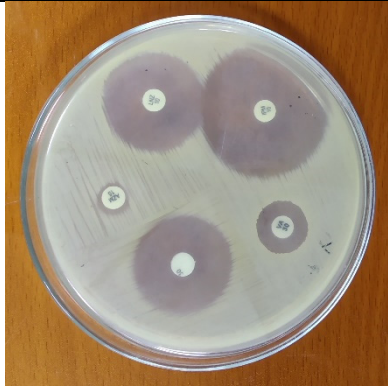
Sample: 41

Sample: 42



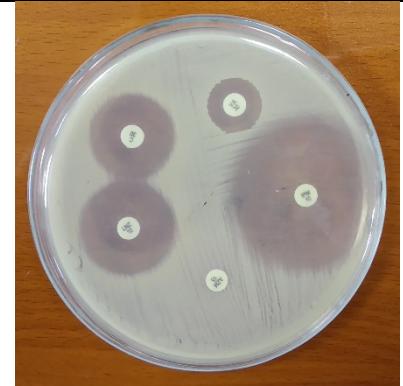
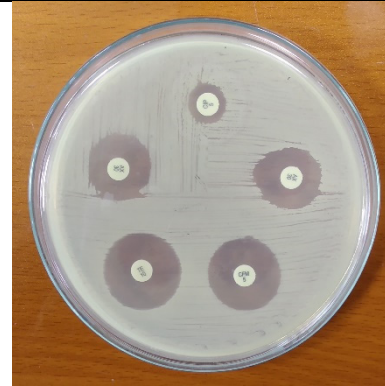
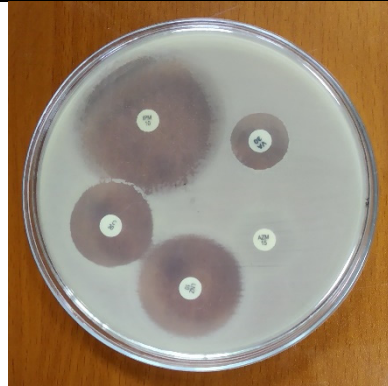
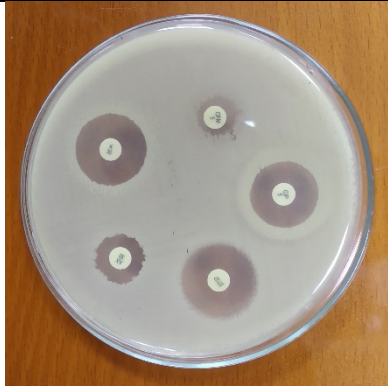
Sample: 43

Sample: 44



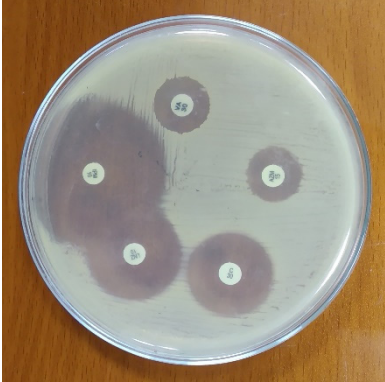
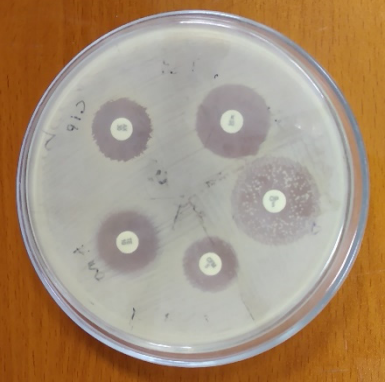


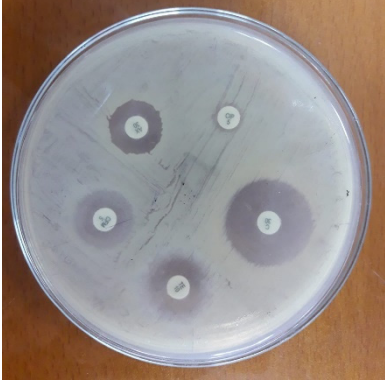
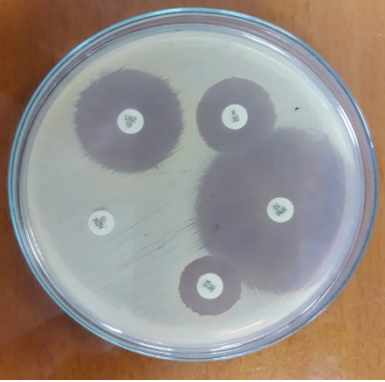
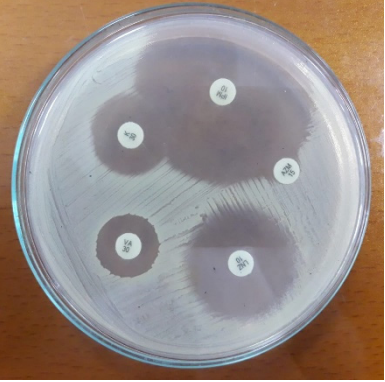
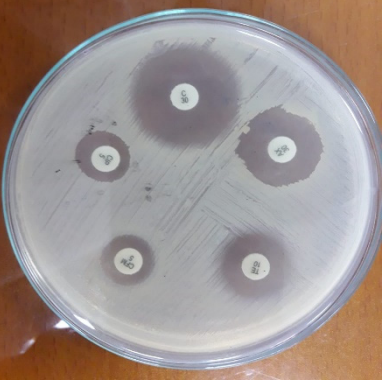
Sample: 45

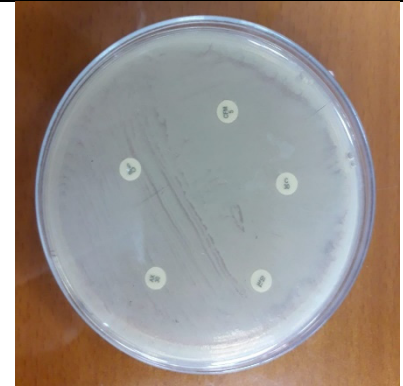
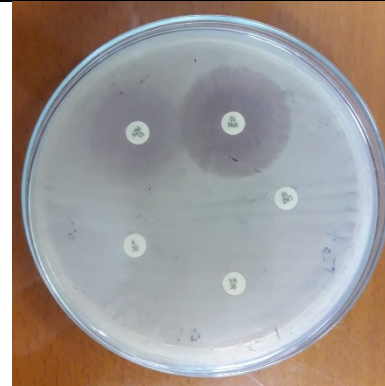
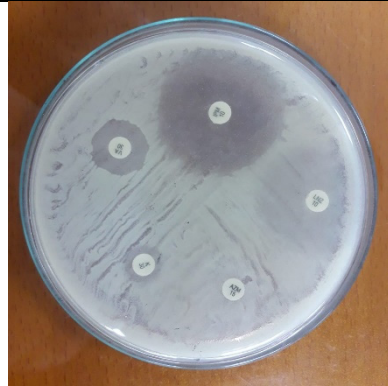
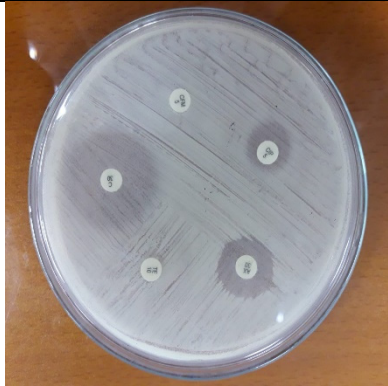
Sample: 46



Sample: 47

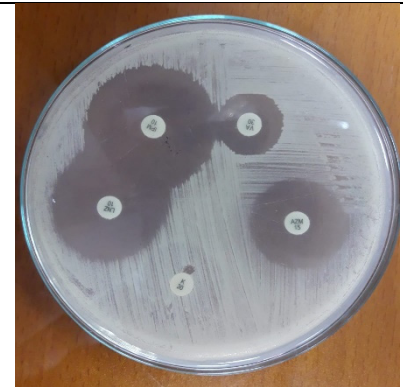
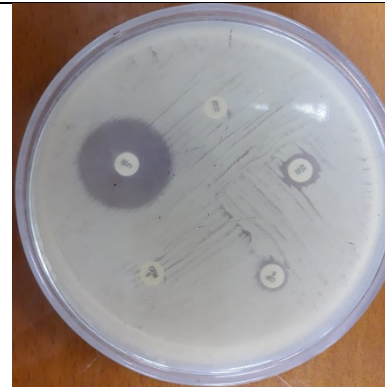
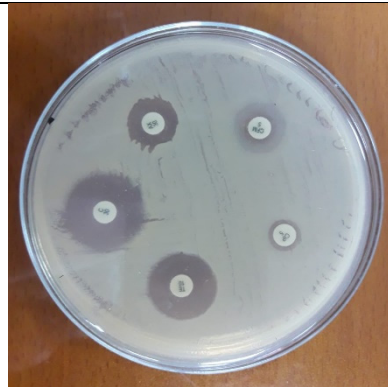
Sample: 48

			
<p>Sample: 49</p>		<p>Sample: 50</p>	
			
<p>Sample: 51</p>		<p>Sample: 52</p>	



Sample: 53

Sample: 54



Sample: 55

Sample: 56

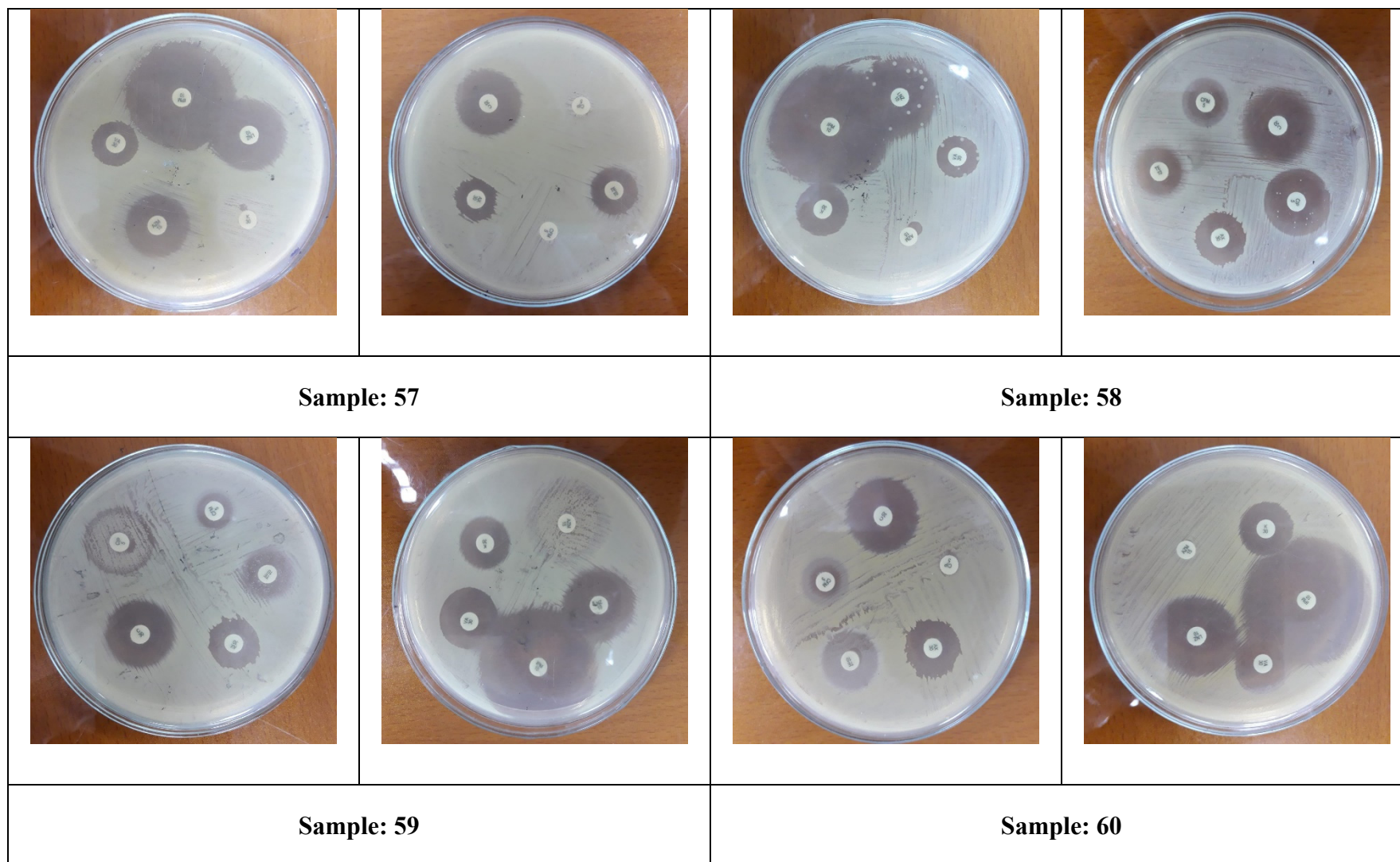


Figure S1: Antibiotic Susceptibility Profile of Sixty Clinical Isolates of *Staphylococcus aureus*

2. Gel doc images of all genes

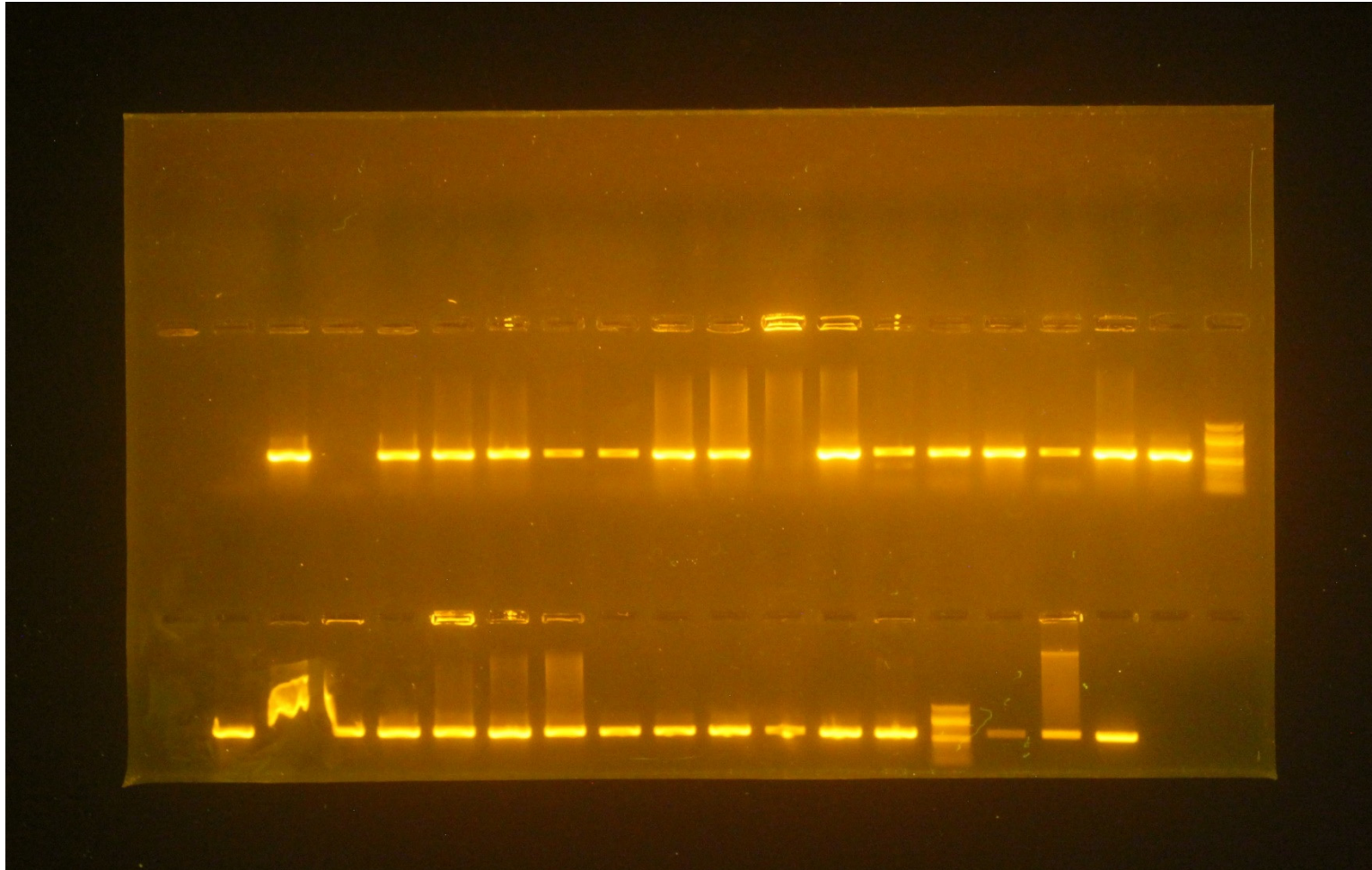


Figure S2: Detection of the Presence of norA Gene (Sample 01-30) in the Clinical Isolates of *Staphylococcus aureus*. Sample 7, 9 & 19 that were earlier checked to check the viability of the primer, were used as control in the second row.

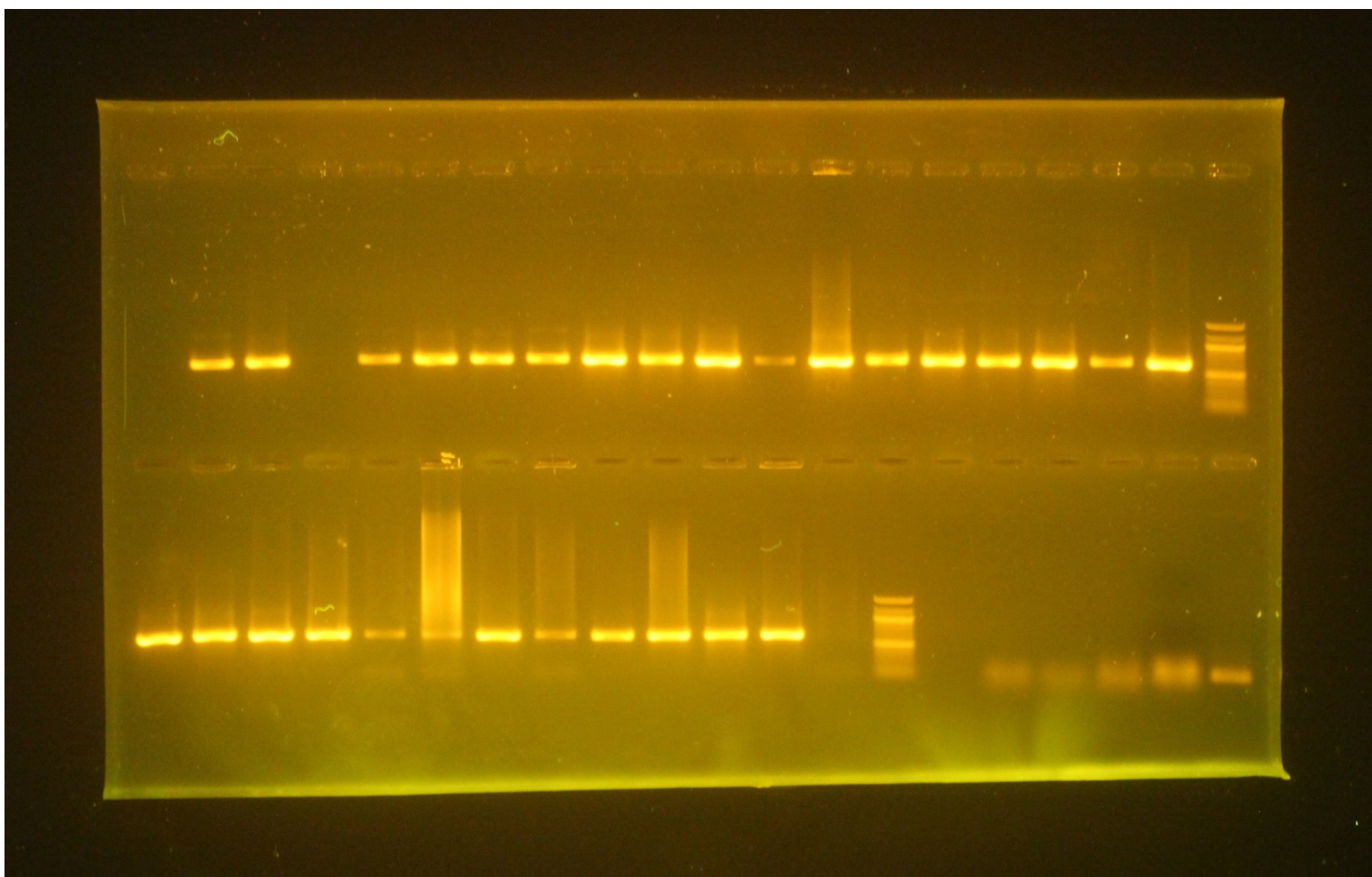


Figure S3: Detection of the Presence of norA Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*

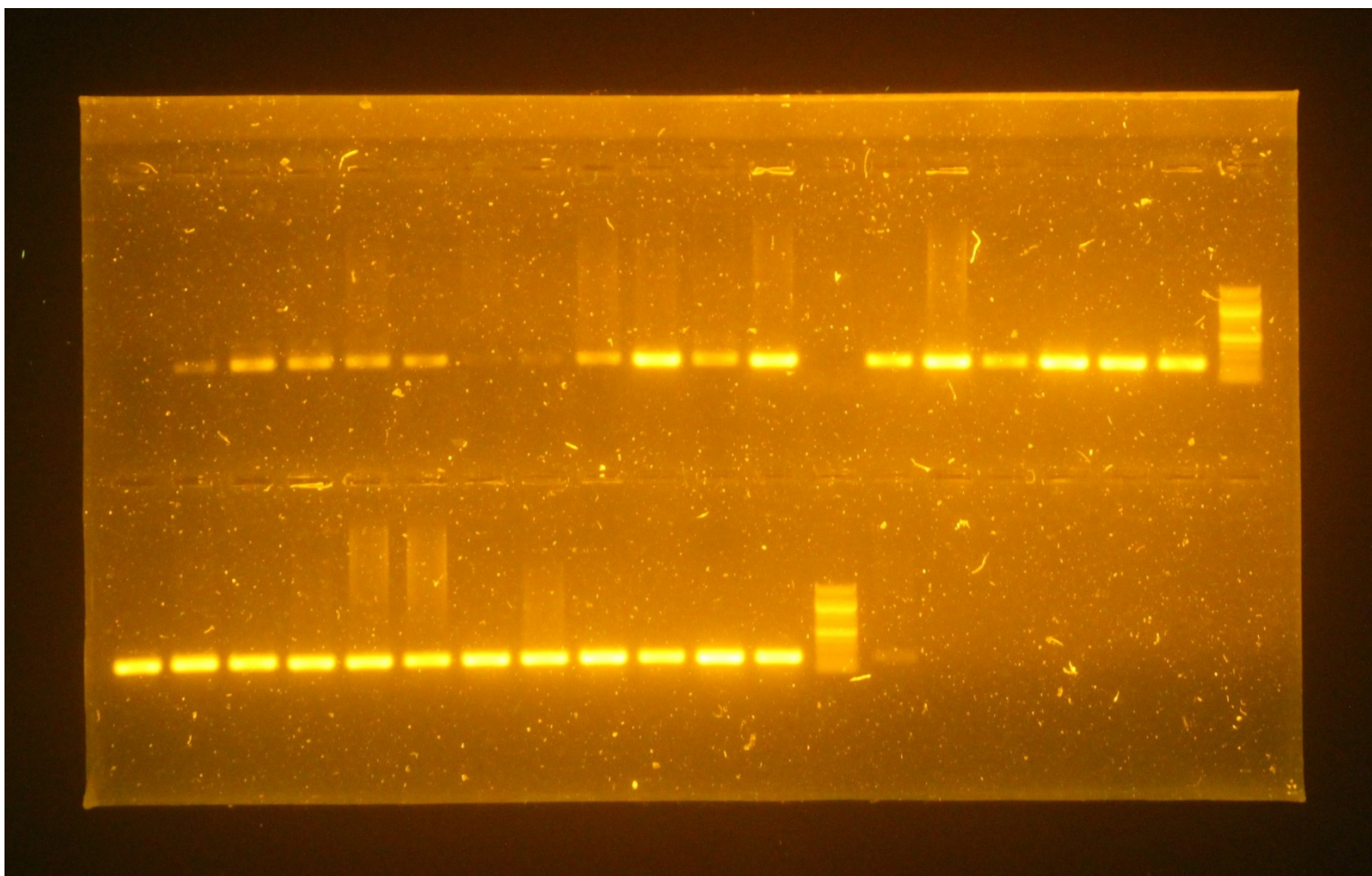


Figure S4: Detection of the Presence of norB Gene (Sample 01-30) in the Clinical Isolates of *Staphylococcus aureus*

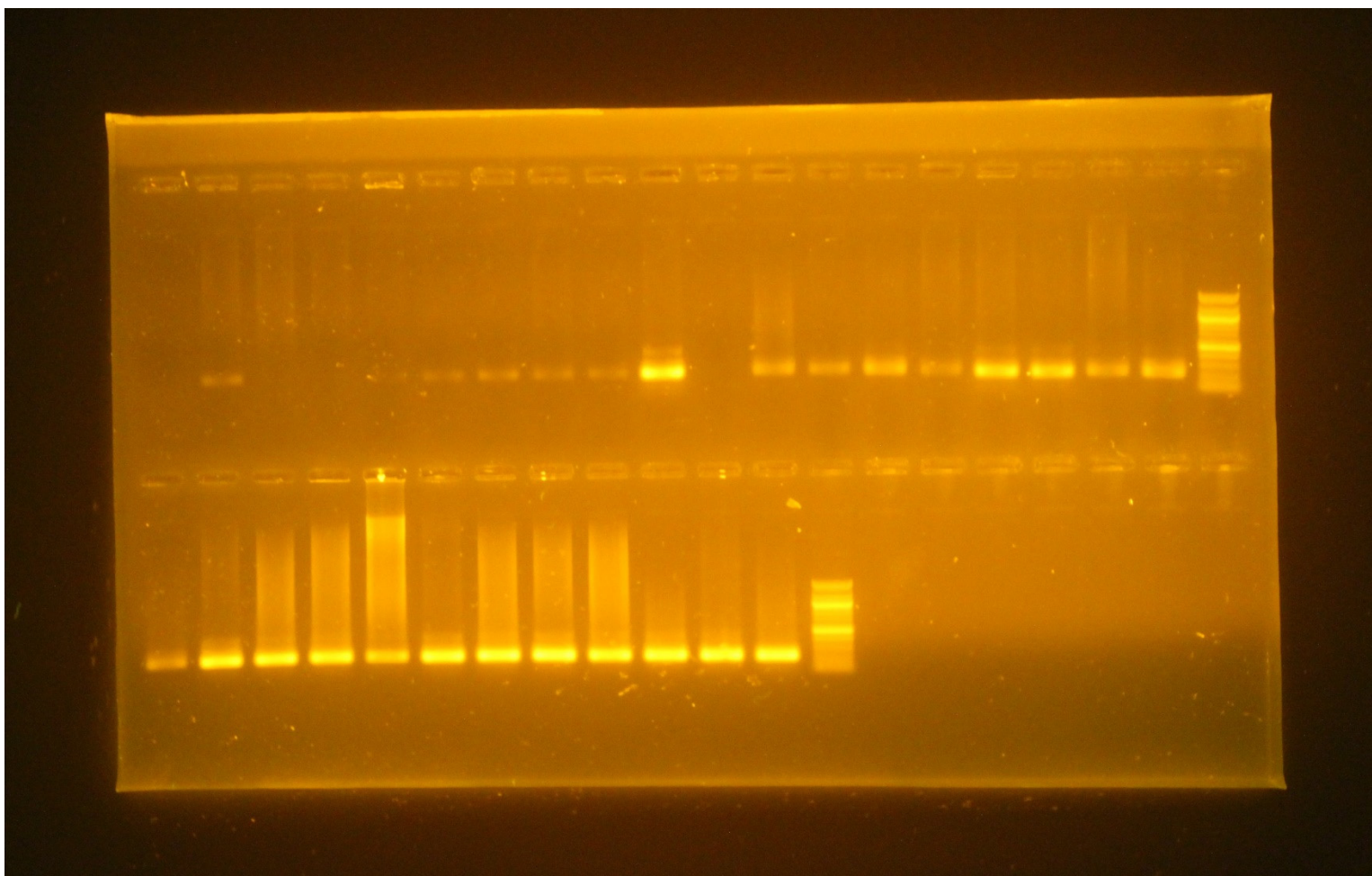


Figure S5: Detection of the Presence of norB Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*

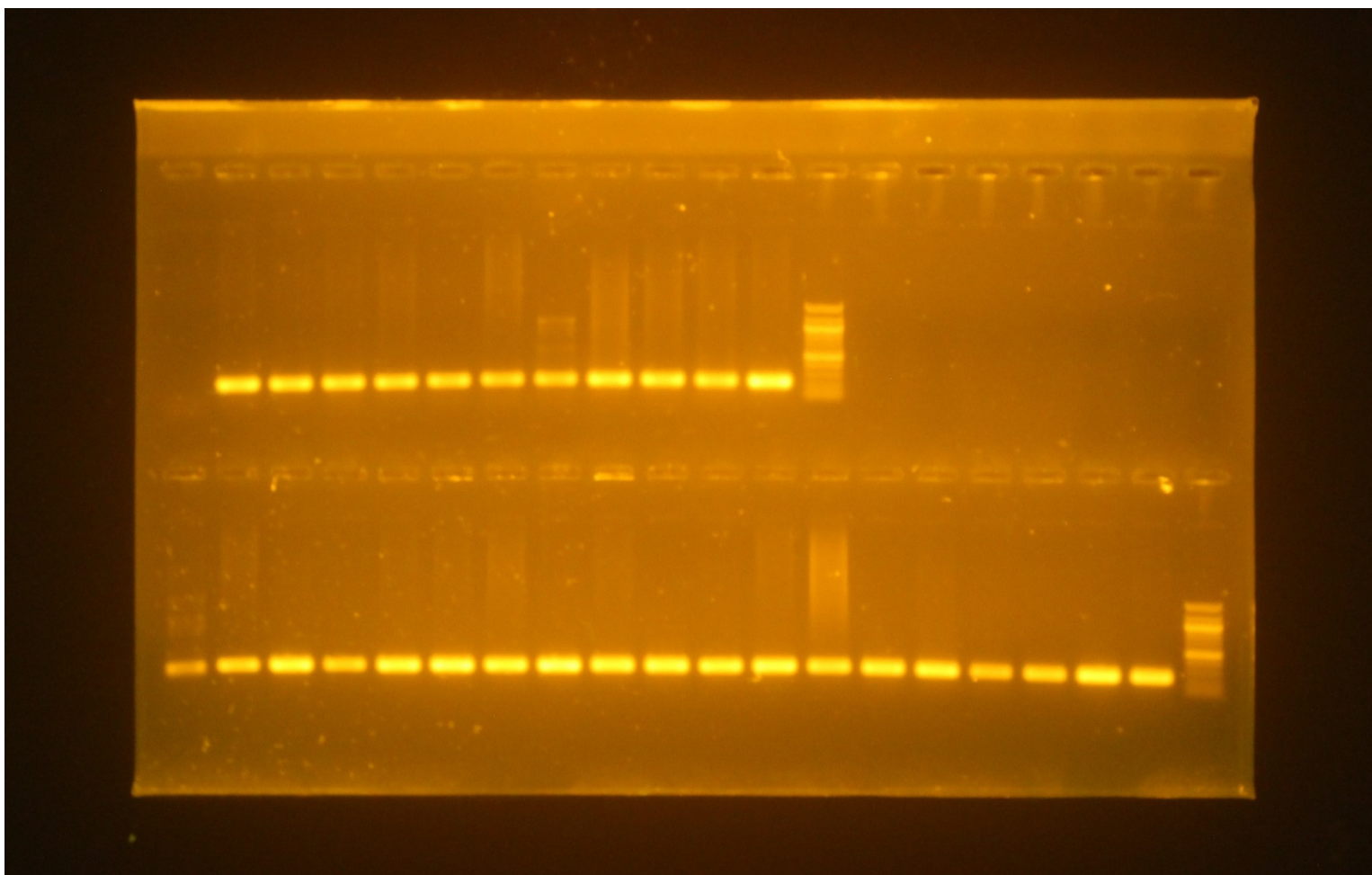


Figure S6: Detection of the Presence of norC Gene (Sample 01-30) in the Clinical Isolates of *Staphylococcus aureus*

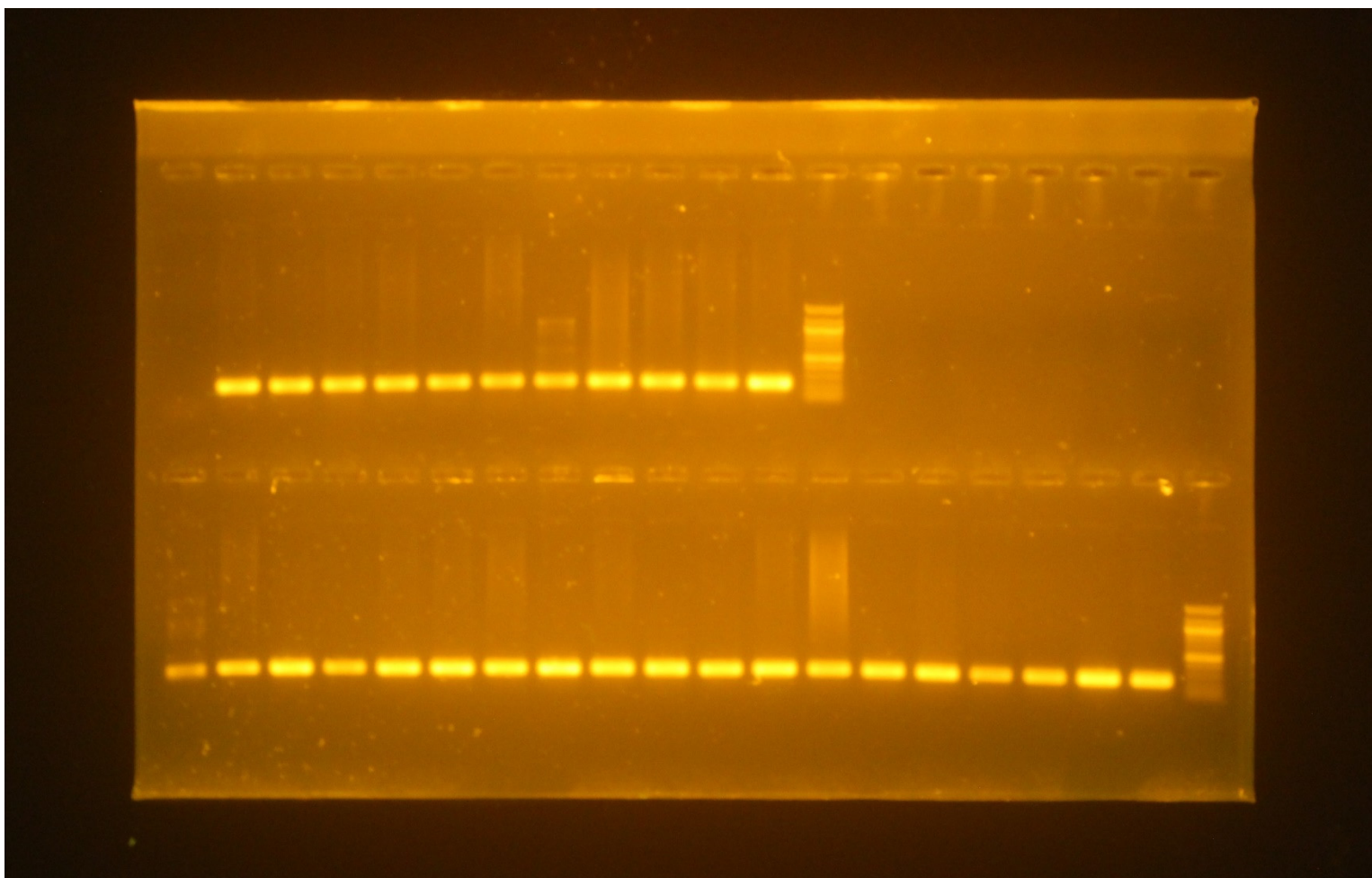


Figure S7: Detection of the Presence of norC Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*

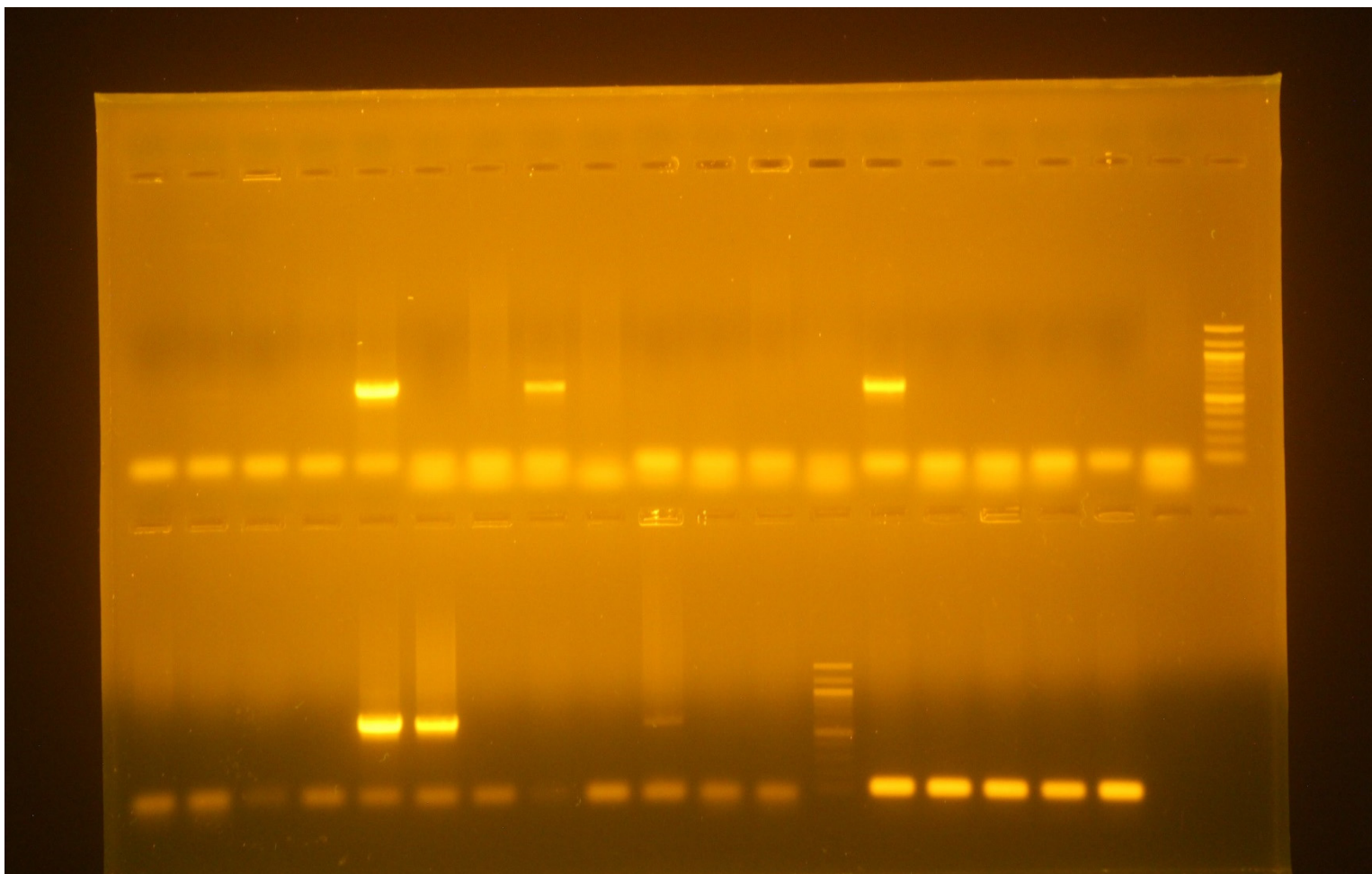


Figure S8: Detection of the Presence of qacAB Gene (Sample 1-30) and sepA (Sample 26-30) in the Clinical Isolates of *Staphylococcus aureus*

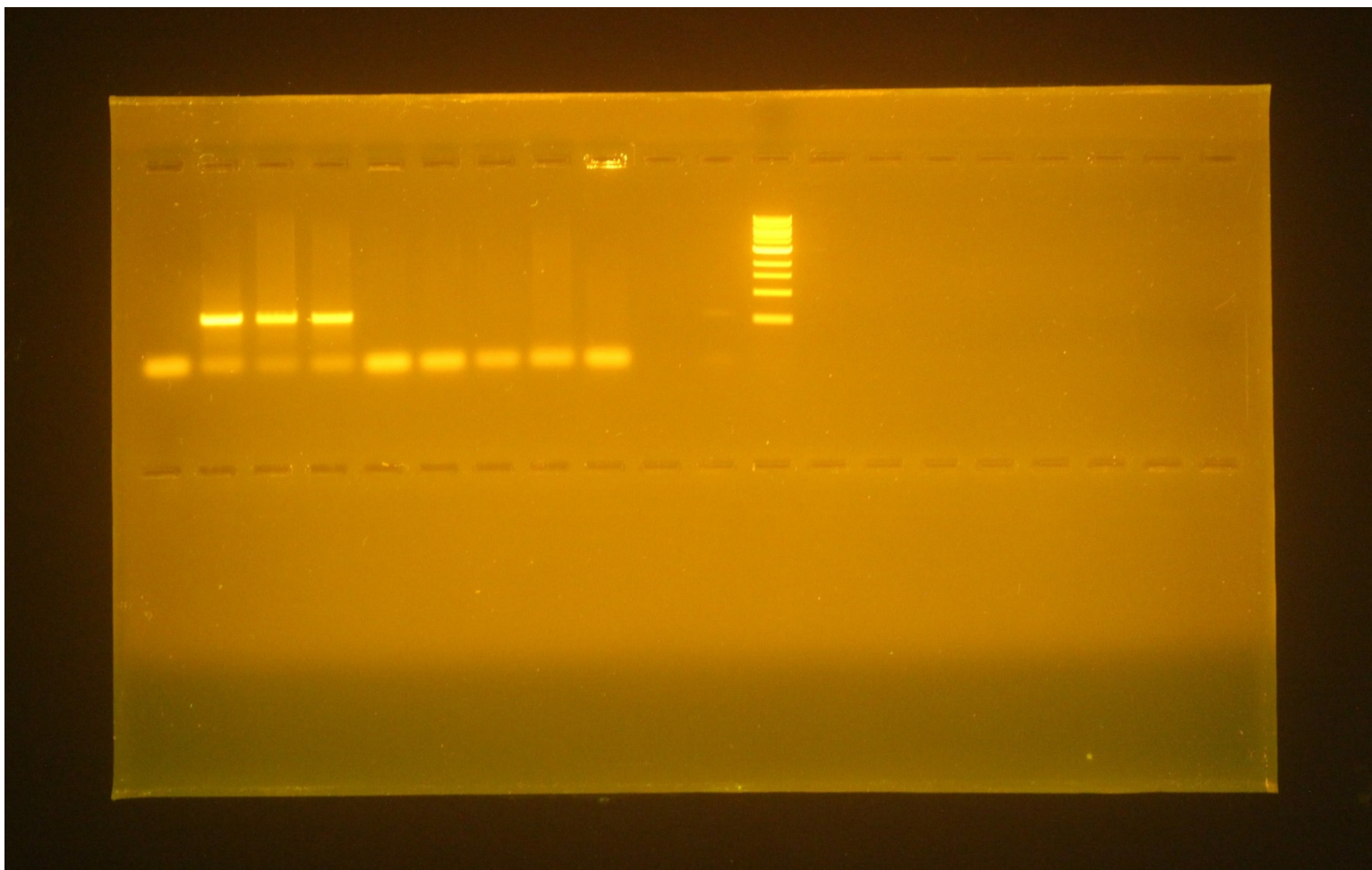


Figure S9: Detection of the Presence of qacAB Gene (Sample 31-40) in the Clinical Isolates of *Staphylococcus aureus*

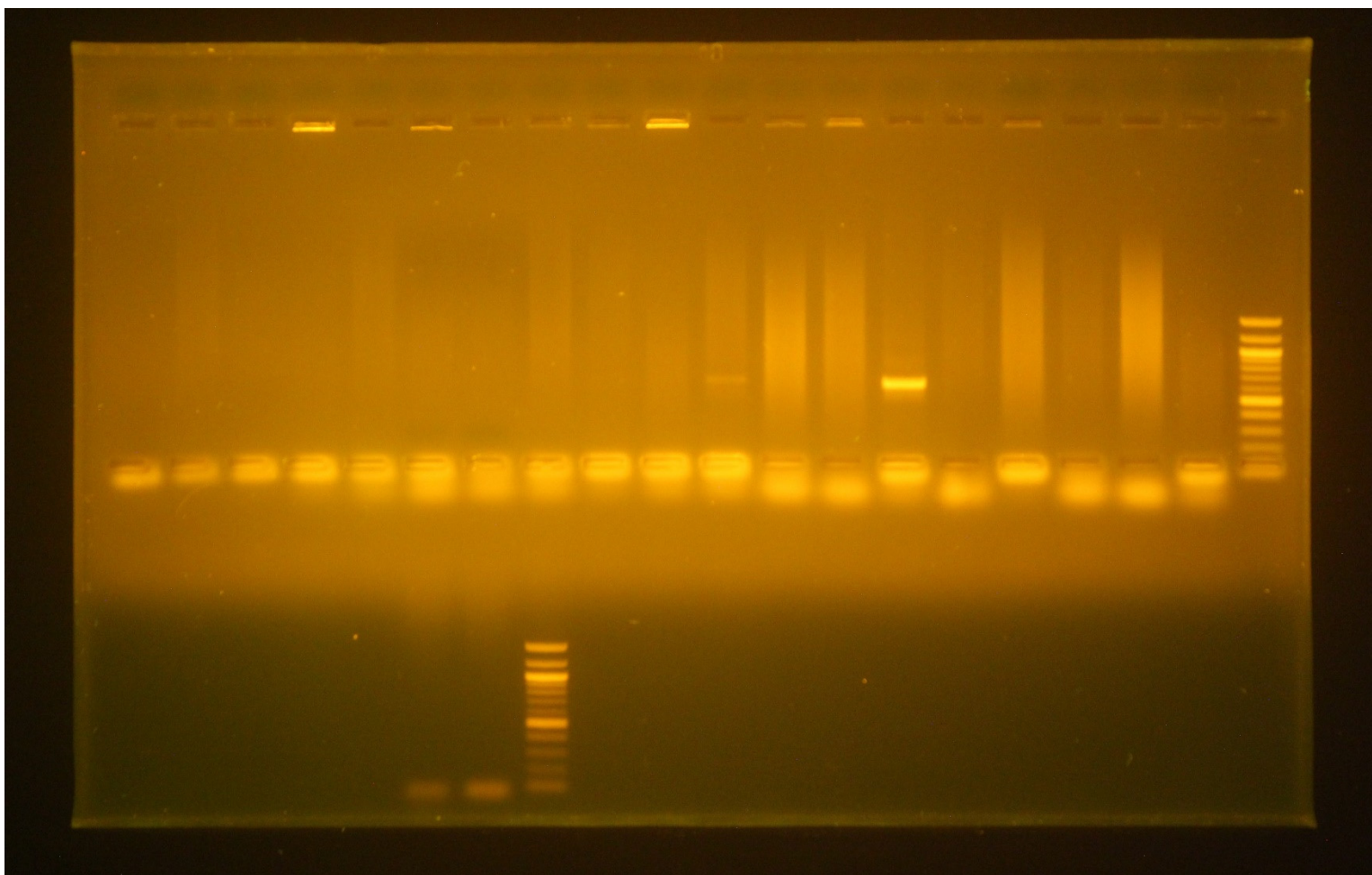


Figure S10: Detection of the Presence of qacAB Gene (Sample 41-60) in the Clinical Isolates of *Staphylococcus aureus*

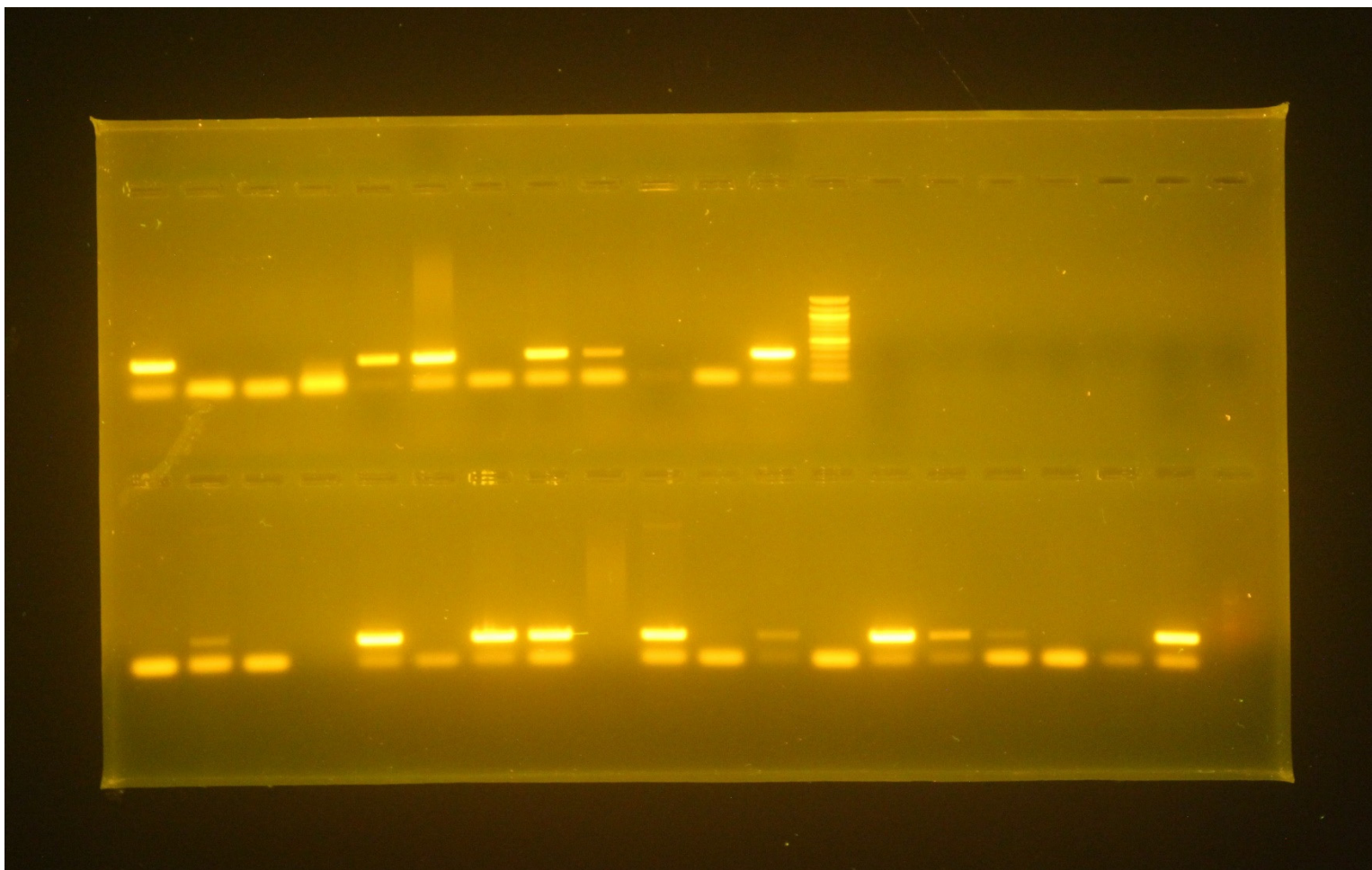


Figure S11: Detection of the Presence of mecA Gene (Sample 1-30) in the Clinical Isolates of *Staphylococcus aureus*

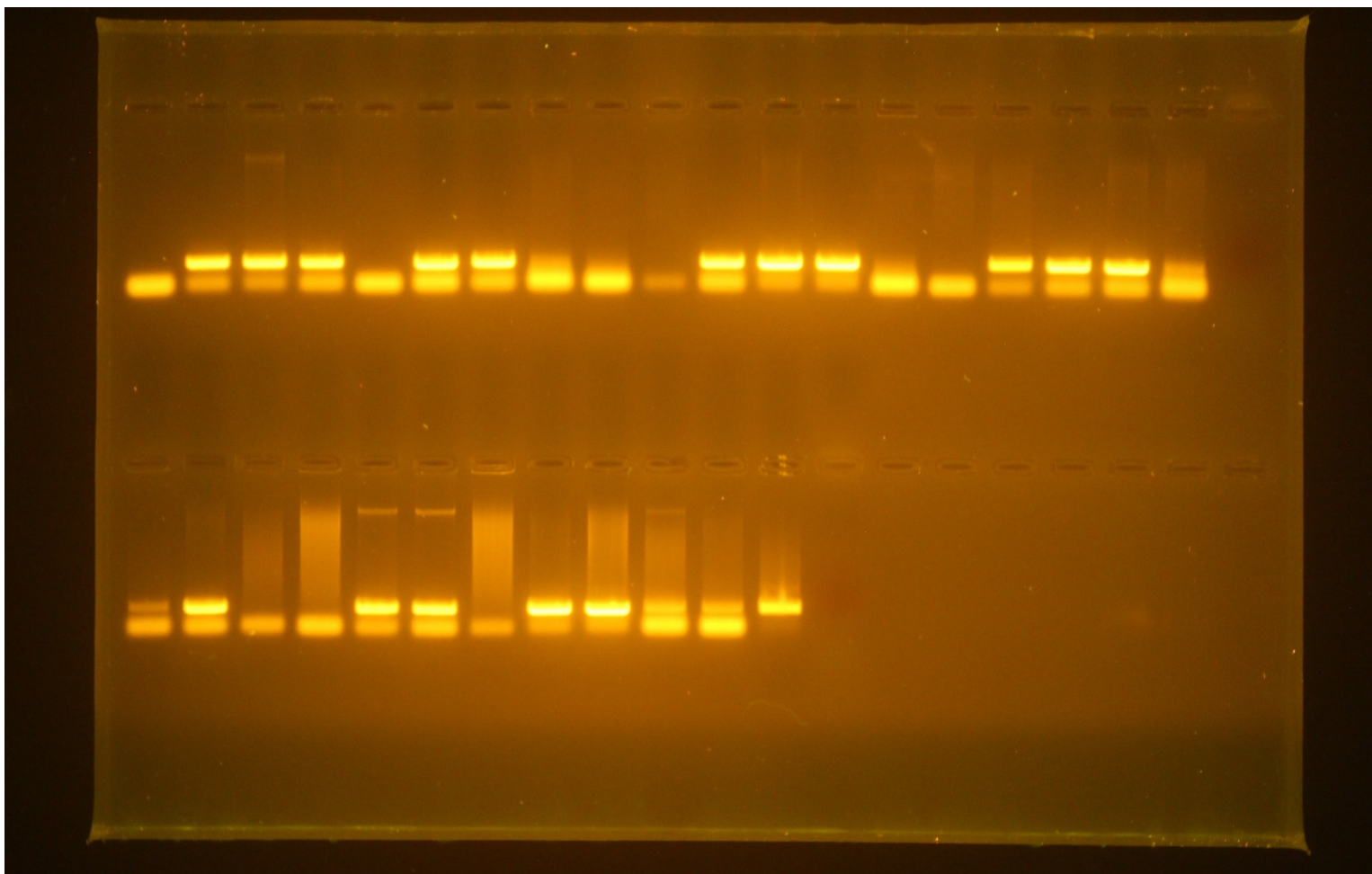


Figure S12: Detection of the Presence of mecA Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*

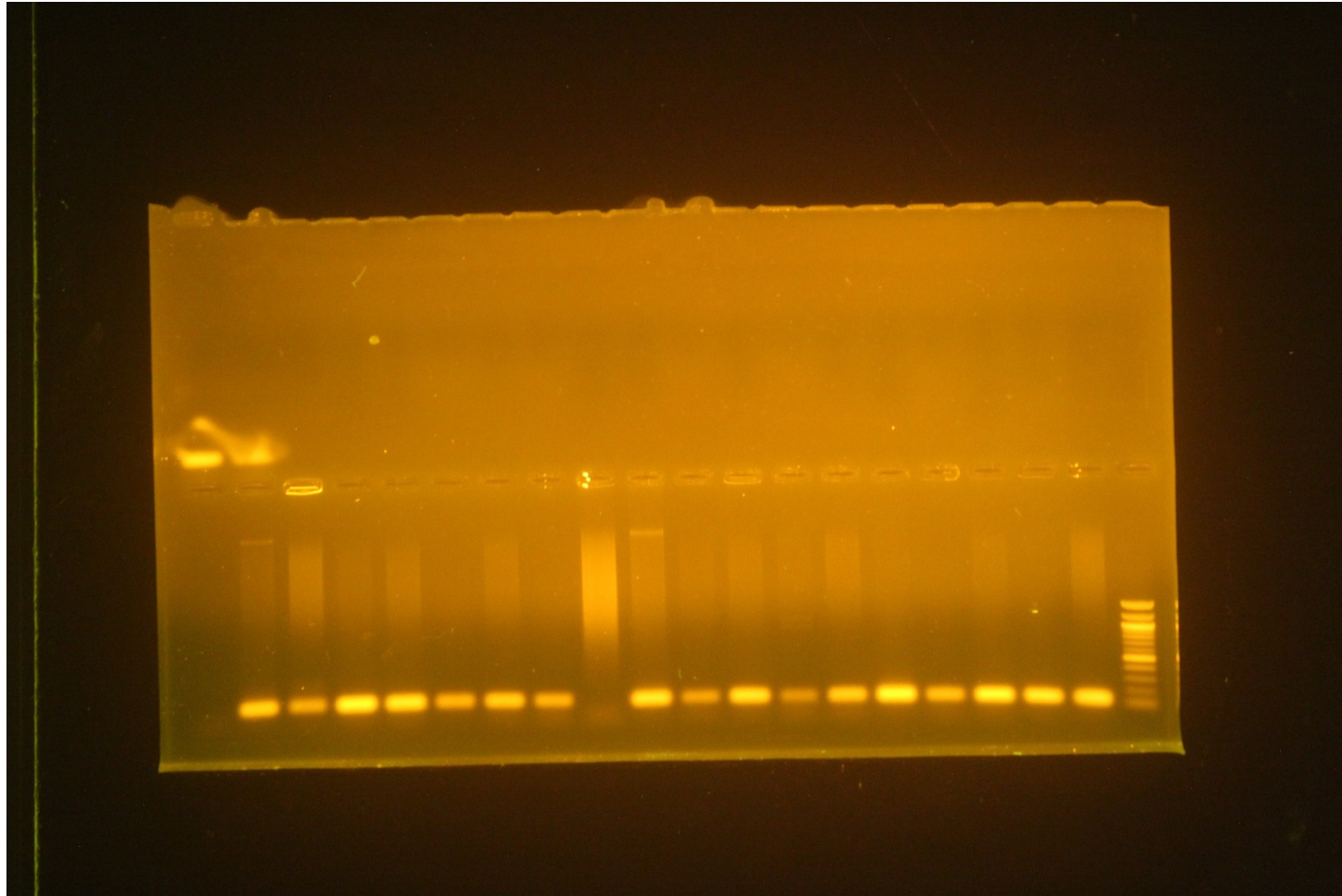


Figure S13: Detection of the Presence of sepA Gene (Sample 1-18) in the Clinical Isolates of *Staphylococcus aureus*

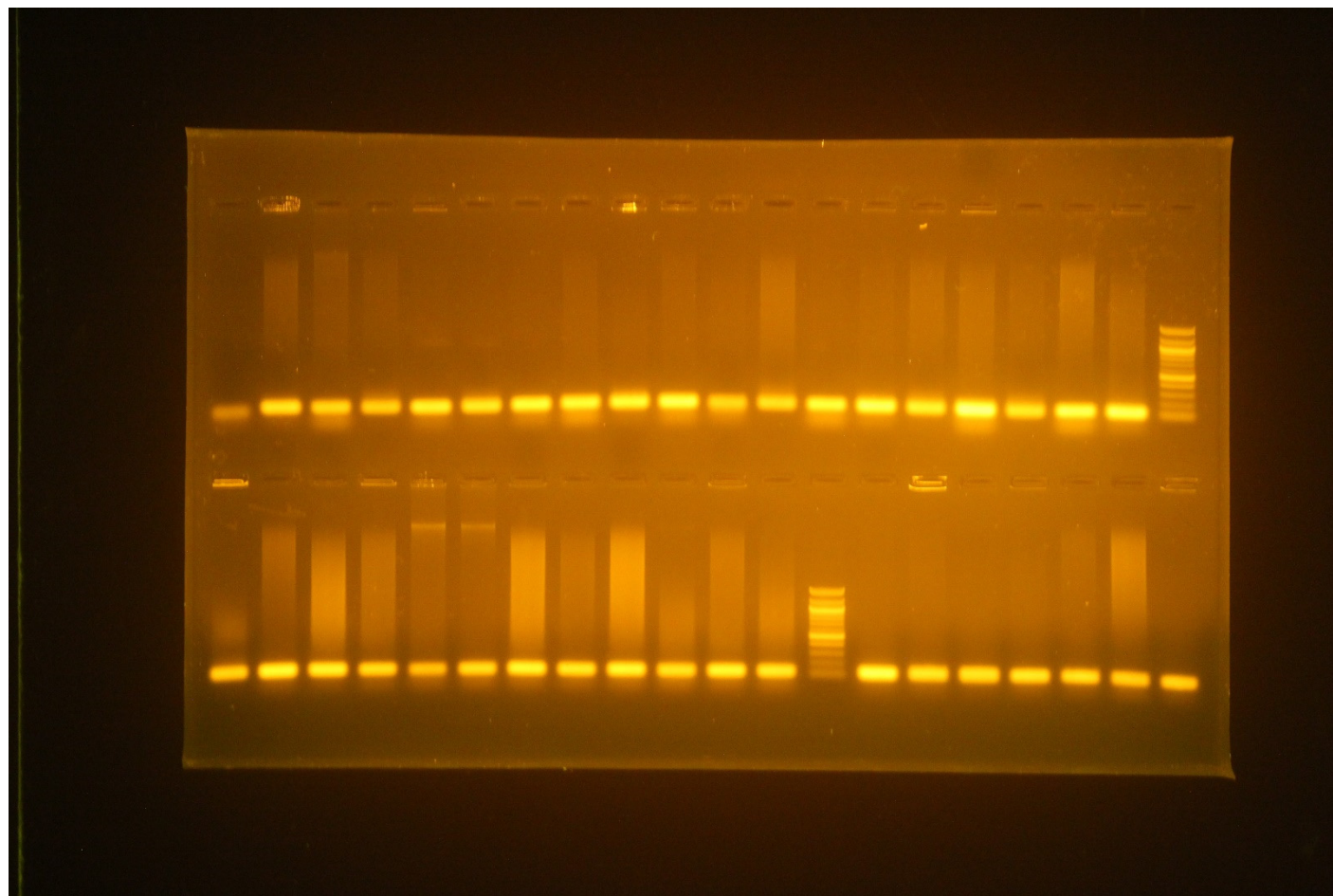


Figure S14: Detection of the Presence of sepA Gene (Sample 31-60; 19-25) in the Clinical Isolates of *Staphylococcus aureus*

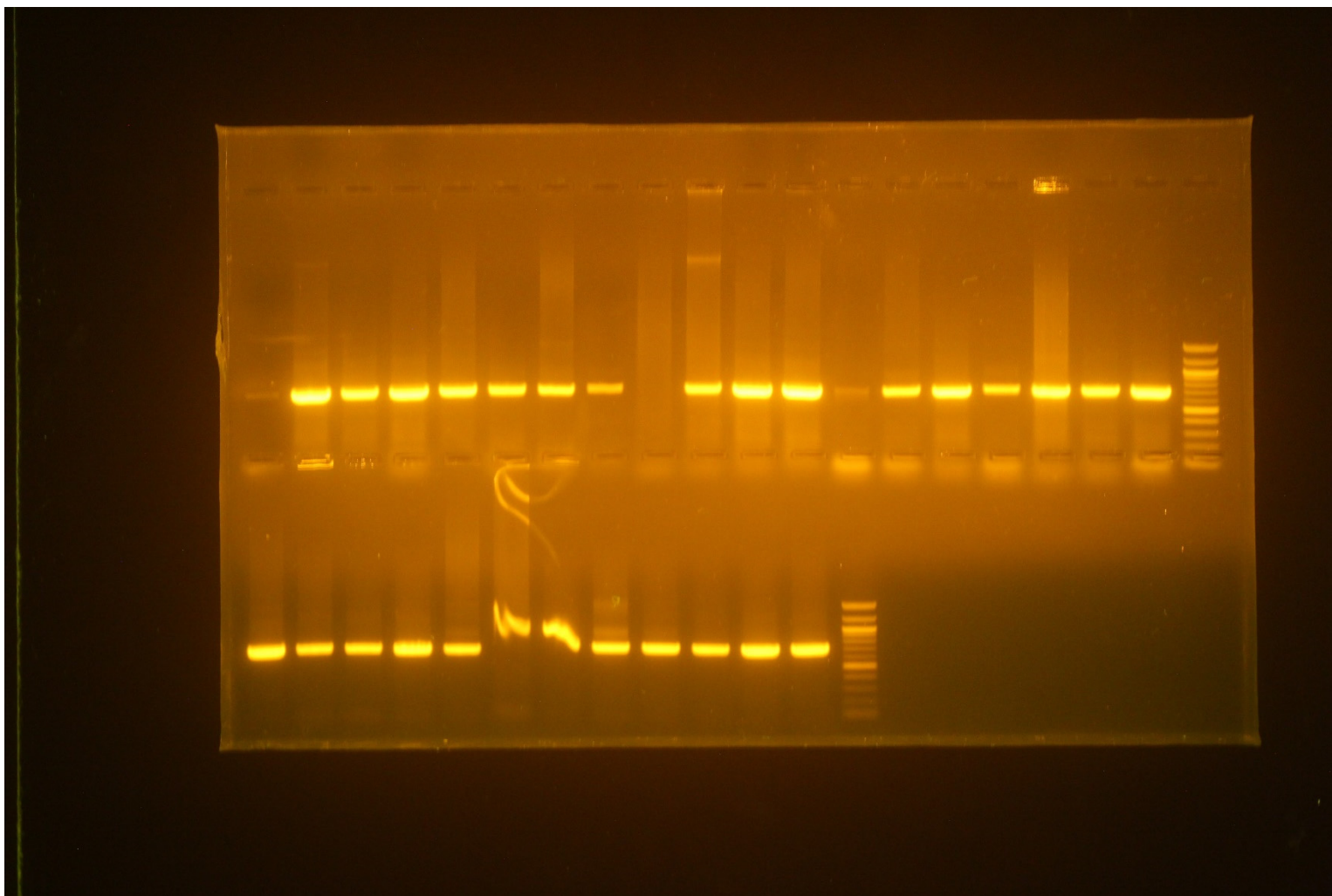


Figure S15: Detection of the Presence of mepA Gene (Sample 1-30) in the Clinical Isolates of *Staphylococcus aureus*

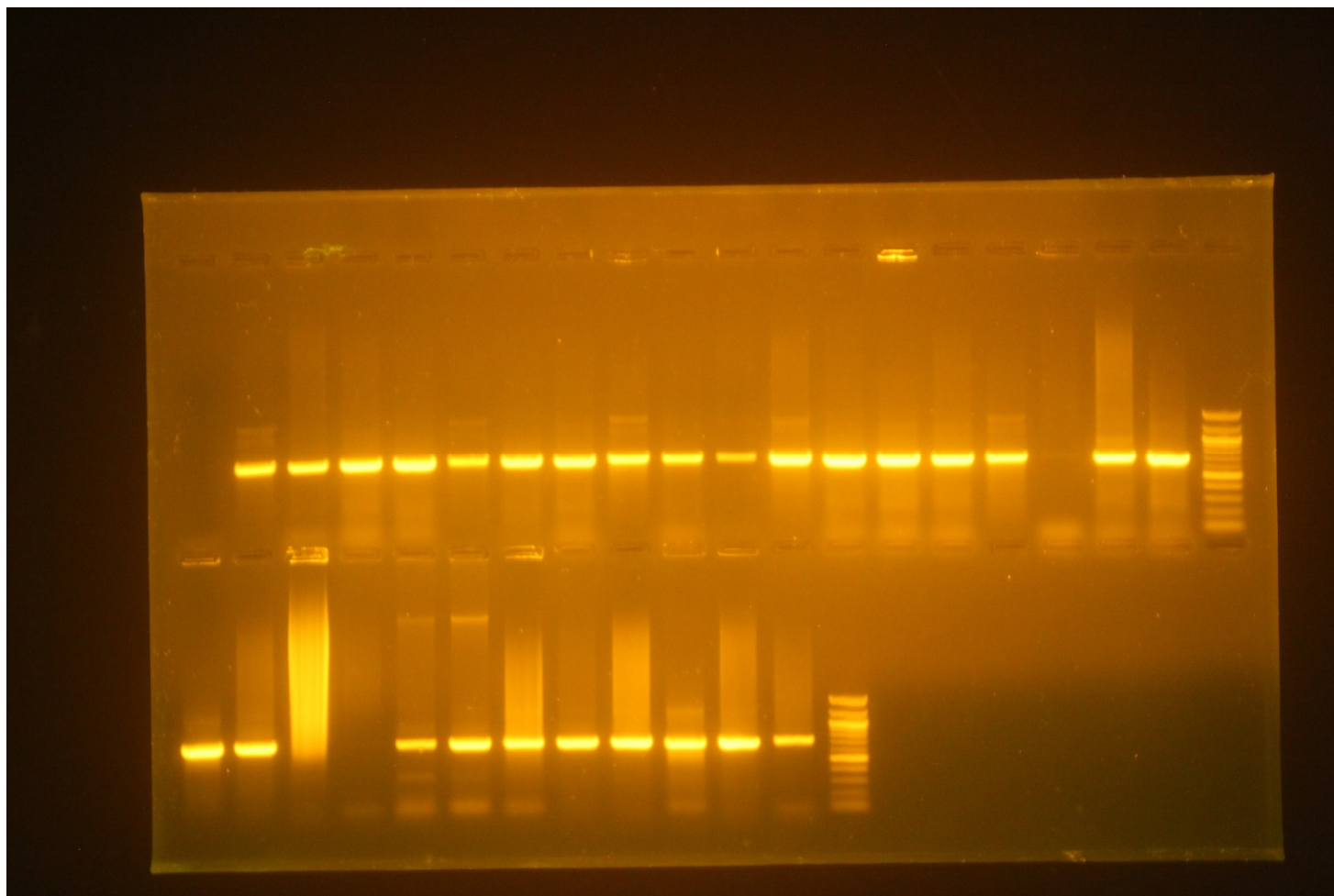


Figure S16: Detection of the Presence of mepA Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*

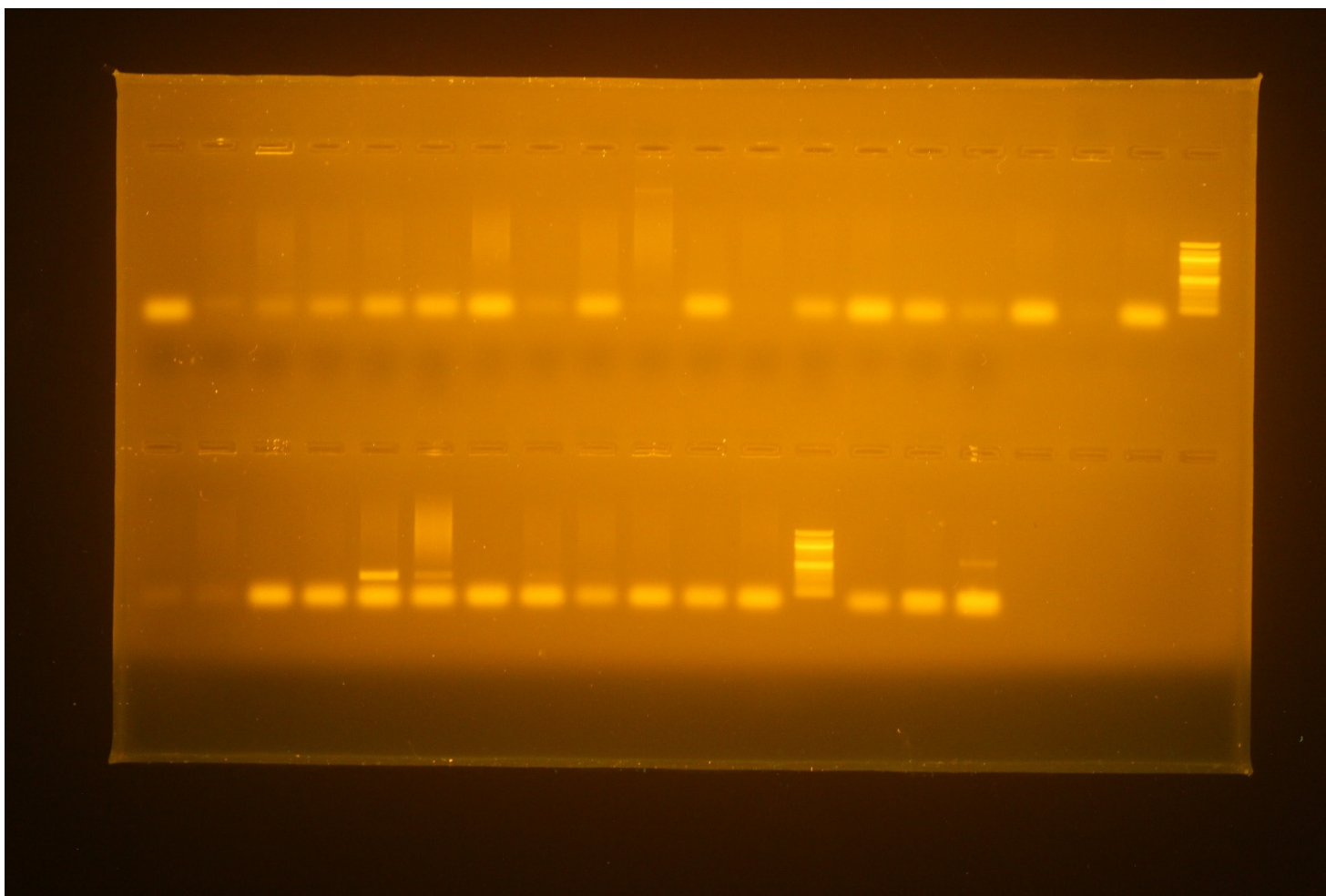


Figure S17: Detection of the Presence of smr Gene (Sample 1-30) in the Clinical Isolates of *Staphylococcus aureus*

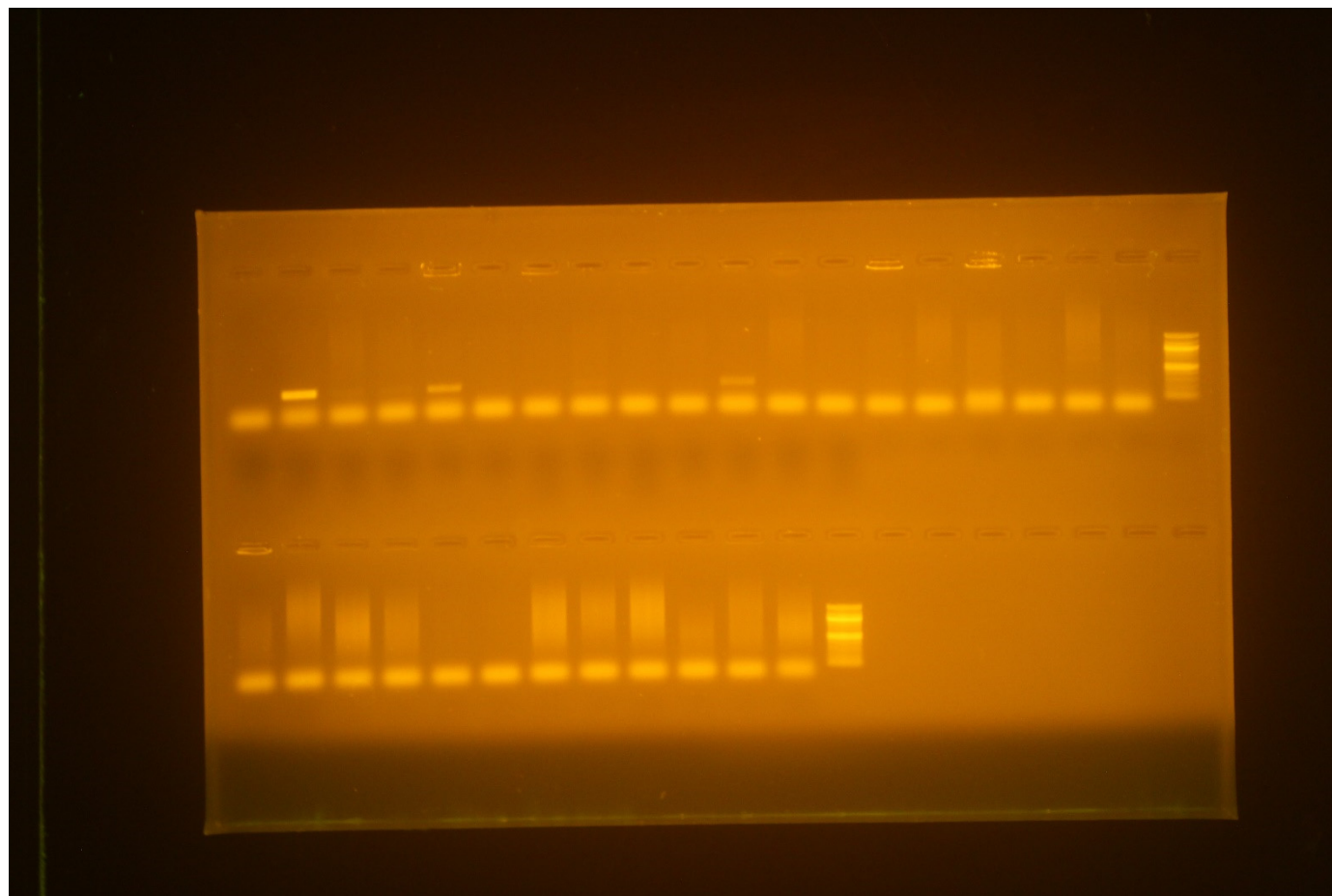


Figure S18: Detection of the Presence of smr Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*

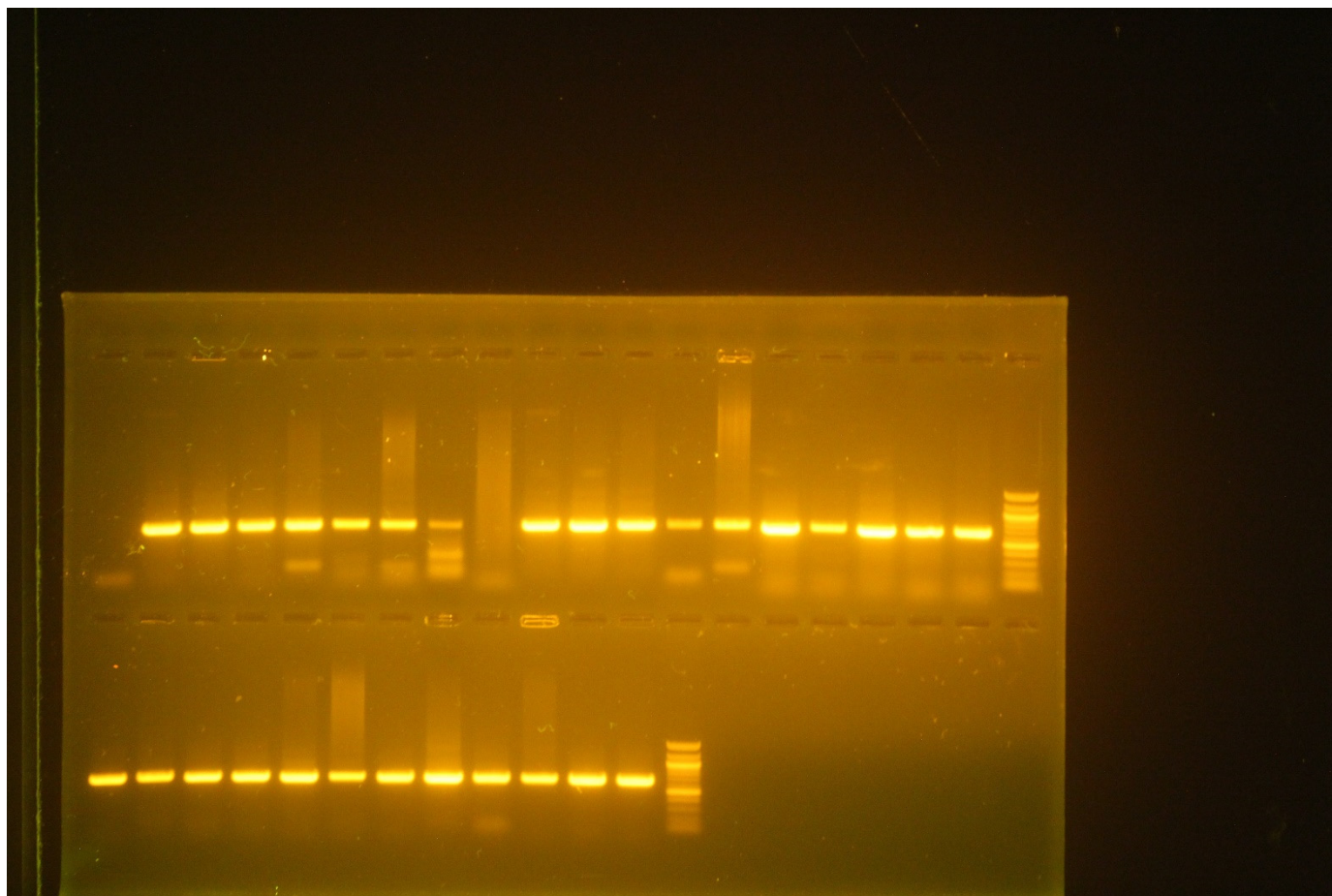


Figure S19: Detection of the Presence of mdeA Gene (Sample 1-30) in the Clinical Isolates of *Staphylococcus aureus*

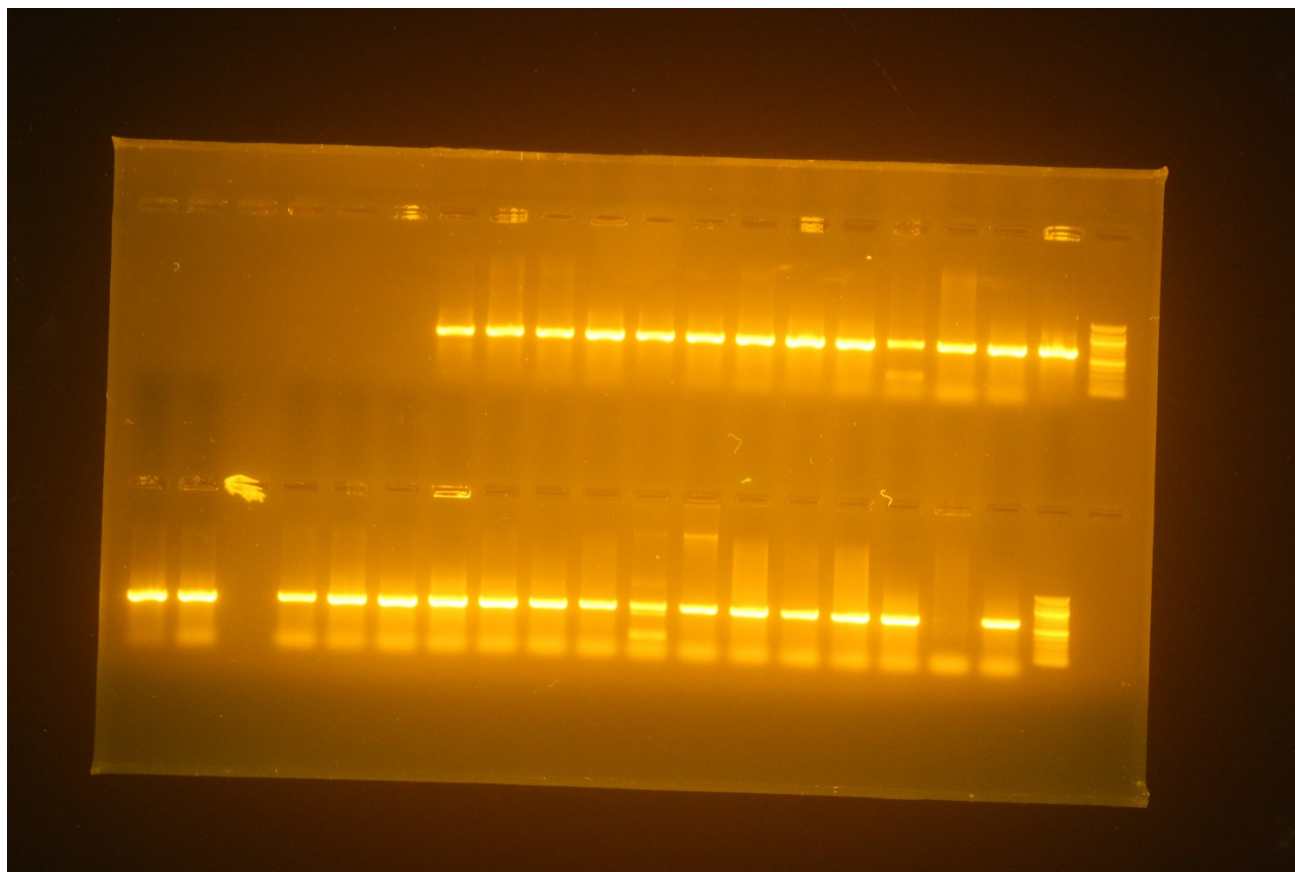


Figure S20: Detection of the Presence of mdeA Gene (Sample 31-60) in the Clinical Isolates of *Staphylococcus aureus*