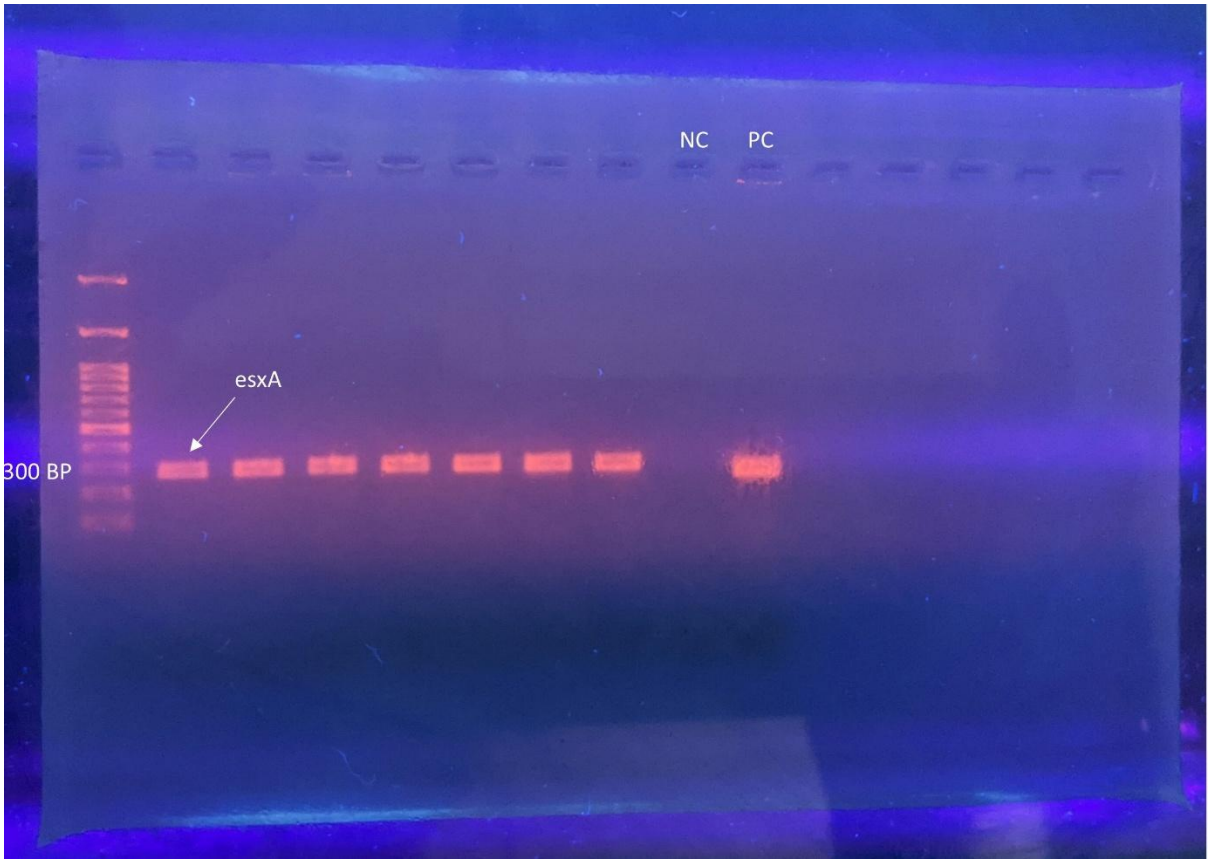
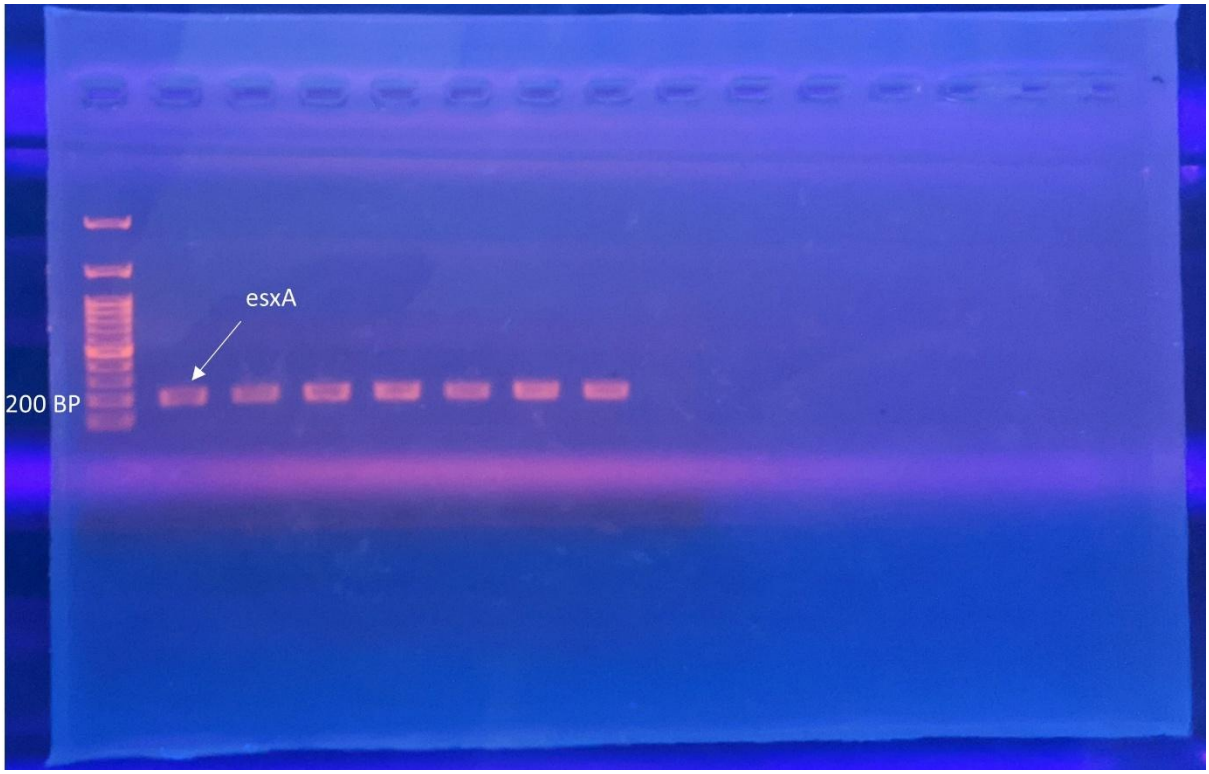
Supplementary File

Supplementary Table 1. Primer sequences utilized in this study

Gene	Primer Sequence (5′-3′)	Product Length (bp)	Purpose
esxA	GCAATGATTAAGATGAGTCCAGAGG TTATTGCAAACCGAAATTATTAGAA	291	PCR
esxA	TTACGGGCAAGGTTCAGACC ACAGCGTCAGCAGTGCTATT	198	qPCR
16 srRNA	ACGGTCTTGCTGTCACTTATA TACACATATGTTCTTCCCTAATAA	257	Internal control



Supplementary Figure 1. PCR confirmation of the *esxA* gene in *Staphylococcus aureus* clinical isolate. Agarose gel electrophoresis showing amplification of the *esxA* gene (~300 bp) from genomic DNA of *S. aureus* clinical isolates. Lanes correspond to different isolates tested. NC = Negative control; PC = Positive control. The arrow indicates the expected *esxA* product band. Presence of bands confirms that the tested isolates harbor the *esxA* gene, indicating Type VII Secretion System (T7SS) positivity.



Supplementary Figure 2. RT-qPCR confirmation of *esxA* gene expression in *Staphylococcus aureus* clinical isolate.
Agarose gel electrophoresis of PCR products amplified from cDNA confirms transcriptional expression of the *esxA* gene (~200 bp). Lanes represent different *S. aureus* isolates. The presence of bands at the expected size indicates active expression of *esxA*, validating Type VII Secretion System (T7SS) functionality under monoculture conditions.