

1 Supporting Information for

2 **Development of a novel rapid visual LAMP platform for detection of methicillin-**

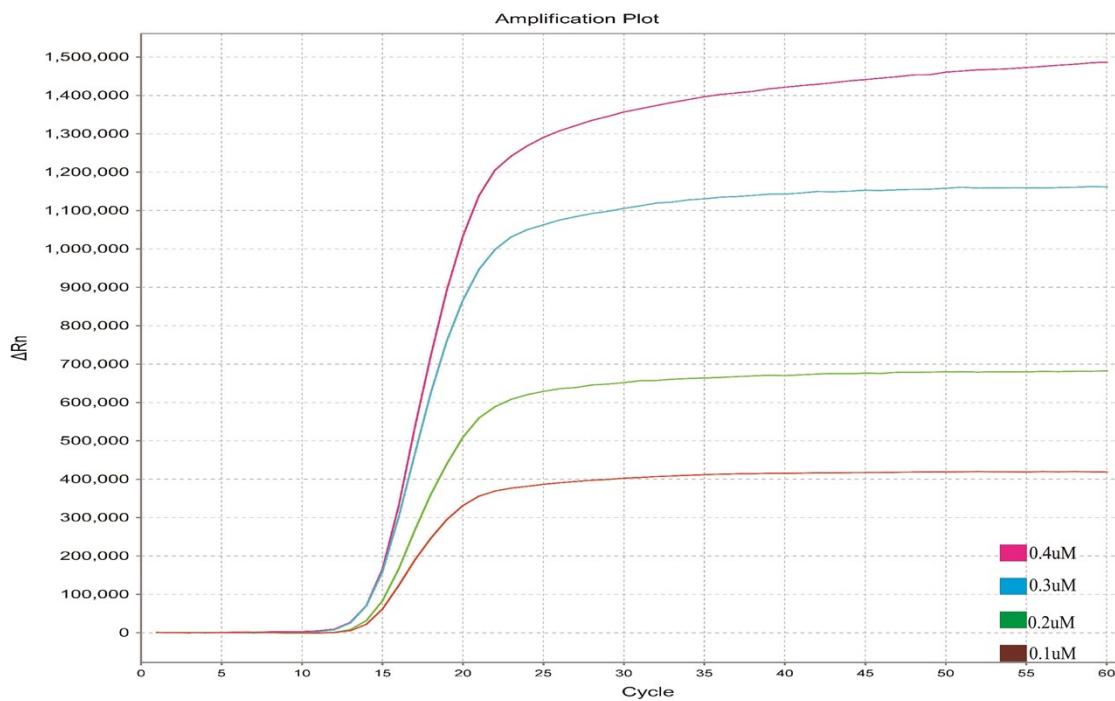
3 **resistant *Staphylococcus aureus* (MRSA) in food**

4 Kaiwei Hu^{a#}, Qiuyan Chen^{a#}, Xiaozhen Xu^a, Qijie Lin^a, Jianmin Zhang^a, Xiaowei Wu

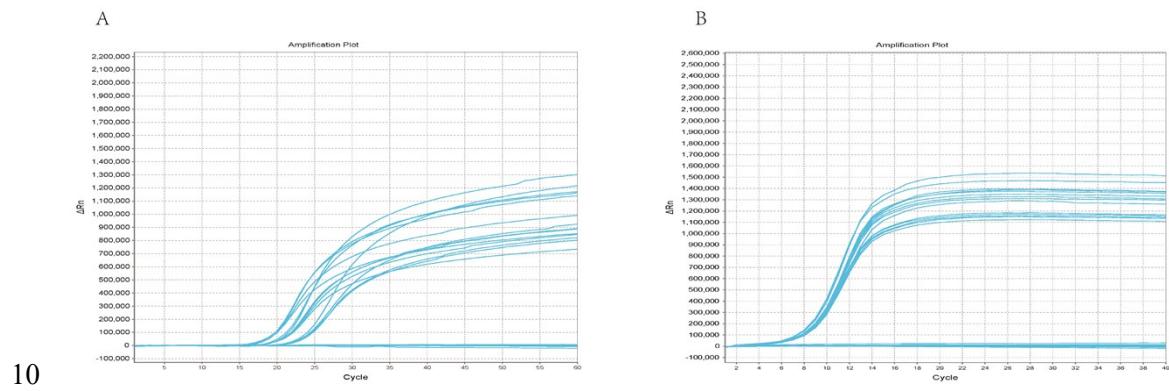
5 ^{b*}, Chenggang Xu^{a*}

6 **Table S1. The EP-LTT values and CT values of each positive sample**

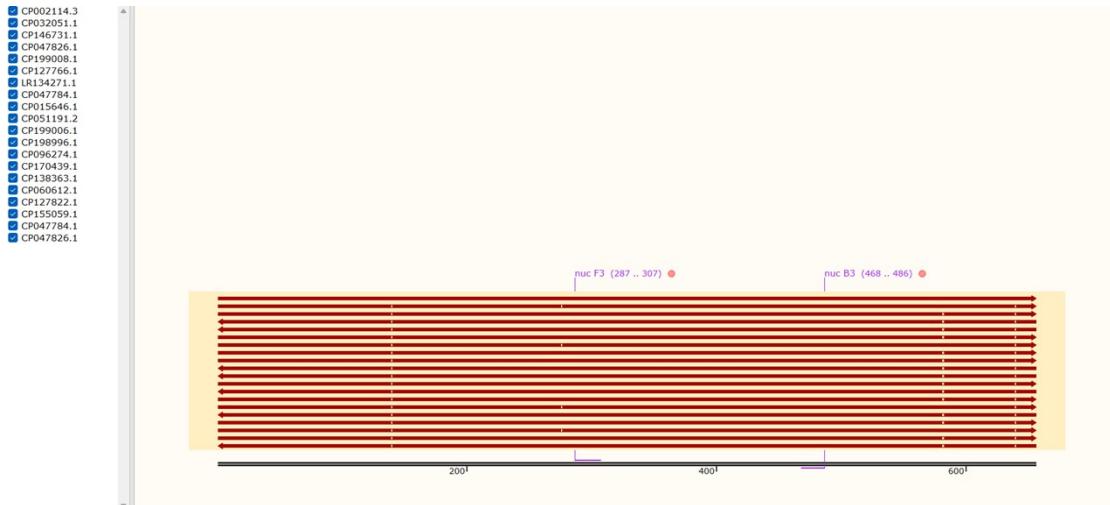
| Positive sample | EP-LAMP (TT) | qPCR (CT) |
|-----------------|--------------|-----------|
| 4 | 12.26 | 7.73 |
| 7 | 16.22 | 7.79 |
| 11 | 10.22 | 7.74 |
| 19 | 17.57 | 7.73 |
| 20 | 16.74 | 7.85 |
| 23 | 11.27 | 8.04 |
| 24 | 15.86 | 7.84 |
| 25 | 17.49 | 7.49 |
| 30 | 10.07 | 7.86 |
| 31 | 12.03 | 7.39 |
| 32 | 9.88 | 7.96 |
| 38 | 17.80 | 8.04 |
| 39 | 17.09 | 7.85 |
| 40 | 17.49 | 8.12 |



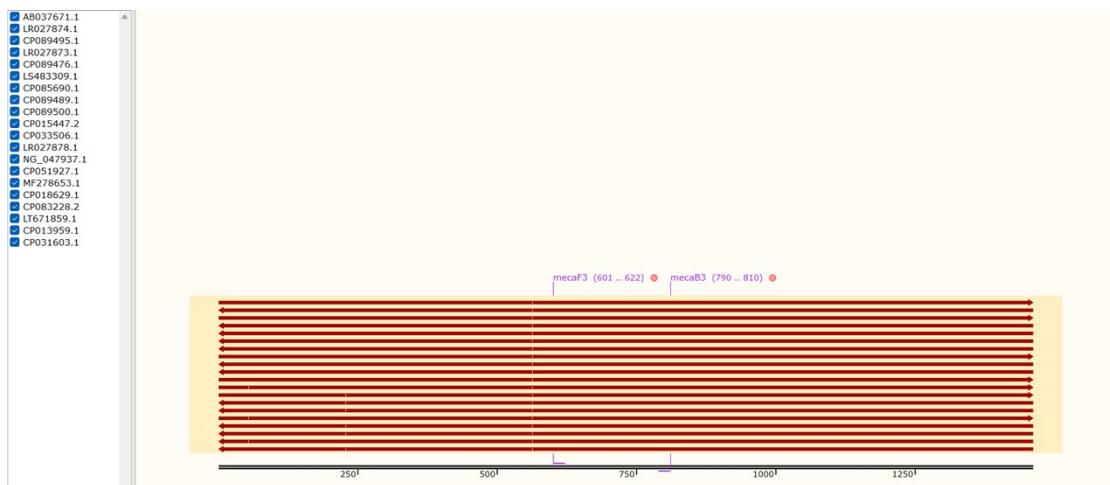
9 Figure S1. EP-LAMP reaction *nuc* gene probe concentration optimization



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 11 **Figure S2. Detection of *Staphylococcus aureus* in actual samples using EP-**
 12 **LAMP and SYBR Green qPCR assays, (A) Detection of *S. aureus* in actual**
 13 **samples using the EP-LAMP assay, (B) Detection of *S. aureus* in actual samples**
 14 **using the qpcr assay**



17 **Figure.S3. Sequence alignment of multiple *Staphylococcus aureus* genes related
18 to *nuc***



20 **Figure.S4. Sequence alignment of multiple *Staphylococcus aureus* genes related
21 to *meca***

Confirmation of Publication and Licensing Rights**September 11th, 2025**

Subscription Type: Student Plan - Academic
Agreement number: GN26QQSMQ2
Publisher Name: analytical methods

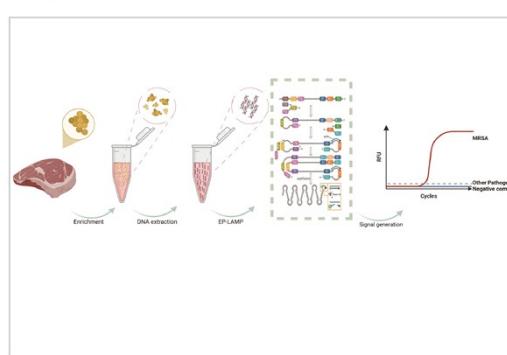
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23 **Figure.S5. The abstract image was created by biorender and has been licensed**
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