

**Identification Gene Encoding *mecA* in *Methicillin-resistant Staphylococcus aureus* from Coass Students Swab Hand in Airlangga University Veterinary Hospital**

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**ABSTRACT**

The research was done with the aim to identify the *mecA* gene *Methicillin-resistant Staphylococcus aureus* (MRSA) from PPDH students swab hand. In total, 10 hand swab samples from coass students were collected and analysis. Bacterial identification based on the growth in MSA media, Gram staining, catalase test, coagulase test, hemolysis test, screening test with ChromID MRSA, the antibiotic sensitivity test with Oxacillin, and *mecA* genes by using Polymerase Chain Reaction (PCR). Isolation and identification *Staphylococcus aureus* were found in three samples that showed positive result in MSA, positive catalase test, positive coagulase test, and positive hemolysis test. MRSA *screening* test were found in three samples that showed positive MRSA strain. Antibiotics sensitivity test for three of samples found that *Staphylococcus aureus* in 33,33% resistant and 66,7% sensitive to *Oxacillin*. In PCR test, one sample showed positive presence of *mecA* gene. In conclusion, the presence of *mecA* gene was found and it could be indicated by direct contact with pets or owners with infected MRSA.

Keywords: *Staphylococcus aureus*, *Methicillin-resistant Staphylococcus aureus*, *mecA* gene, Hand Swab, PCR