

PROFIL TOTAL PROTEIN *Staphylococcus aureus*
(*Methycilin Resisten Staphylococcus aureus*)
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ABSTRAK

S. aureus berubah menjadi galur resisten metisilin (*MRSA*) karena sisipan suatu elemen DNA berukuran besar antara 20 – 100 kb yang disebut *staphylococcus cassette chromosome mec (SCCmec)*. Resistensi *MRSA* terhadap metisilin dan terhadap suatu antimikroba golongan betalaktam disebabkan perubahan pada *protein binding penicillin (PBP)* yang normal yaitu PBP2 menjadi PBP2a. Penelitian ini bertujuan untuk mengetahui profil total protein *S.aureus* *MRSA* dan Non *MRSA*. Protein didapatkan dengan cara mengisolasi *S.aureus* dan Non *MRSA* dengan metode sonikasi, kemudian disepersi menggunakan SDS PAGE 12%. Hasil analisa profil total protein *S.aureus* *MRSA* dan Non *MRSA* menunjukkan jumlah pita protein yang bervariasi yaitu antara 11 – 14 pita dan diketahui bahwa berat molekul 20 – 80 kDa merupakan berat molekul yang dominan muncul pada *MRSA* positif dan Non *MRSA*. *S. aureus* *MRSA* didapatkan protein minor 8 dan protein mayor 7 sedangkan Non *MRSA* didapatkan protein minor 4, protein mayor 7. Hasil ini menunjukkan adanya kespesifikan dari spesies yang sama namun memiliki pita yang berbeda.

Keywords : *MRSA*, Profile Protein, SDS PAGE, *Staphylococcus aureus*.

TOTAL PROTEIN PROFILE *Staphylococcus aureus* (Methicilin Resistant *Staphylococcus aureus*)

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ABSTRACT

S.aureus was changed into category of metisilin resistance because it is inserted big size of DNA element between 20-100 kb which called *Staphylococcus cassette chromosome mec* (SCCmec). MRSA resistance concerning to metisilin and antimicroba of betalactam category is caused by changing of *protein binding penicillin* (PBP) of normal level that was PBP2 into PBP2a. The aim of this research to find MRSA *S.aureus* of protein total profile and Non MRSA. The Protein was acquired to isolate *S. aureus* and Non MRSA by sonikasi method, then next process will use SDS PAGE 12 %. The result of Non MRSA and *S. aureus* MRSA protein total profile were showed variation of total protein strings between 11 - 14 Strings and founded 20-80 kda of molecule weigh that had domination appeared on positive MRSA and Non MRSA. *S.aureus* MRSA was acquired by Minor 8 protein and Major 7 Protein, meanwhile Non MRSA was acquired 4 Minor protein, 7 major protein. This result showed of specification from same Species but have different string.

Keywords: MRSA, Protein Profile, SDS PAGE, *Staphylococcus aureus*.

