ANALISIS PROFIL PROTEIN *Staphylococcus aureus* MULTIDRUG RESISTEN DENGAN SDS PAGE

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ABSTRAK

Tujuan penelitian ini untuk mengetahui profil total protein MRSA, *S.aureus* ATCC, dan *S.aureus* MDR 202 dan MDR 204. Penelitian ini menggunakan 4 strain yaitu MRSA, S.aureus ATCC, S.aureus MDR 202 dan MDR 204, didapatkan dengan mengisolasi protein *S.aureus* dengan metode sonikasi, kemudian diseparasi dengan SDS PAGE 12%. Hasil analisa profil total protein menunjukkan jumlah pita protein yang bervariasi antara 28-32 pita protein dan dengan berat molekul yang bervariasi pula 15-180 kDa merupakan berat molekul yang dominan muncul pada MRSA, *S.aureus* ATCC, dan *S.aureus* MDR. Bakteri strain MRSA didapatkan protein mayor 4 dan protein minor 26 pita. Pada strain ATCC didapatkan protein mayor 4 dan protein minor 24 pita. Sedangkan pada strain MDR 202 didapatkan protein mayor 5 dan protein minor 24 pita. Pada strain MDR 204 didapatkan protein mayor 6 dan protein minor 28 pita. Hasil ini menunjukkan adanya kespesifikan dari spesies yang sama namun memiliki jumlah pita yang berbeda.

Kata kunci : *Staphylococcus aureus*, MDR, MRSA, Profil Protein, SDS PAGE

ANALYSIS PROTEIN PROFILE *Staphylococcus aureus* MULTIDRUG RESISTEN WITH SDS PAGE

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ABSTRACT

The purpose of this study was to determine the total protein profile of MRSA, S.aureus ATCC, and S.aureus MDR 202 and MDR 204. This study used 4 strains namely MRSA, S.aureus ATCC, S.aureus MDR 202 and MDR 204, obtained by isolating S.aureus protein with sonication method, then was aligned with SDS PAGE 12%. The results of the analysis of the total protein profile showed that the number of protein bands varying between 28-32 protein bands and with varying molecular weight 15-180 kDa is the dominant molecular weight appearing on MRSA, S.aureus ATCC, and S.aureus MDR. MRSA strain bacteria obtained 4 major proteins and 26 ribbons minor protein. The ATCC strain, 4 major proteins and 24 ribs minor proteins were obtained. Whereas in MDR 202 strain, there were 5 major proteins and 24 ribbon minor proteins. In MDR 204 strains obtained 6 major proteins and 28 ribbons minor proteins. These results indicate the variation of the same species.

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