

**PROTEIN PROFILE OF BACTERIA *Pseudomonas aeruginosa*  
USING Sodium Dodecyl Sulphate Polyacrylamide  
Gel Electrophoresis METHODS (SDS-PAGE)**

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**ABSTRACT**

The aim of this research to know the protein profile using *Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis* (SDS-PAGE). The side purpose of this research to give a basic knowledge about immunogenic serodiagnostic test for *Pseudomonas aeruginosa*.

This research started by isolate *Pseudomonas aeruginosa* bacteria to *Nutrient Agar*, *Mac Conkey Agar*, *Blood Agar* for 24-48 hours and 37<sup>0</sup>C. *Pseudomonas aeruginosa* identification used microscopic examination and biochemical tests. *Pseudomonas aeruginosa* colonies that grew in *Nutrient Broth* will be extracted using sonication process to gain whole protein from *Pseudomonas aeruginosa*. Sonication process used ultrasonic homogenizer 20.000 hz 4x4 minutes with 2 minute interval.

Supernatant from sonification process will denaturated by *Sodium Dodecyl Sulphate* (SDS) for 5 minutes 100<sup>0</sup>C and electrophoresis process with 200 volt for 2 hours. The characterization by SDS-PAGE showed that *Pseudomonas aeruginosa* have six bands were 34 kDa; 39 kDa; 47 kDa; 49 kDa; 59 kDa and 66 kDa.

**Key words** : *Pseudomonas aeruginosa*, protein band, SDS-PAGE, electrophoresis.