

ABSTRACT

The objective of this research was to try to isolate and characterize the immunogenic protein Egg Binding Spermatozoa (EBP) of Human Sperm as a component of sub unit vaccine. Research was done on August 2002 to August 2003 at Molecular Biology, Faculty of Veterinary Medicine and Tropical Disease Center Airlangga University.

There were 5 steps of Experiment. The First was purification and isolation Human Sperm, continued to develop pure protein suspension. The second step was the developing of inactive vaccines that will be applied to rabbits as animal trial to produce polyclonal antibody. The third step was isolation of protein EBP by using ultra sonication and centrifugation according to modified Matsuyana Technique. The Fourth step was characterization of immunogenic protein using SDS-PAGE technique and Immunoblotting include *Western Blott* and *Dot-Blotting*, was followed by elution of specific immunogenic protein. The Fifth step was in vitro test to measure the antibody tittle.

The research showed that immunogenic protein can be isolated from protein EBP of Human Sperm and characterization of immunogenic protein on a specific protein with molecular weight of 56 kDa. The specific protein as a basic component of sub unit vaccine was applied to experimental human.

The conclusion of this research was isolation and characterization of immunogenic protein was successfully done and specific protein sub unit as a basic component can be recommended to develop EBP sub unit vaccine

Key words : Protein EBP Sperm, specific immunogenic protein candidate of EBF sub unit vaccine.