Immune Response of Mice Against Protein 24 and 71 kDa *Toxocara vitulorum* In Shaping Antibodies and Protection Against Artificial Infection

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ABSTRACT

This study aimed to get 24 and 71 kDa protein of *T. vitulorum* that have a high antigenicity and immunogenicity on ELISA and to get the protein which able to protect mice against artificial infection of L2 *T. vitulorum*. Proteins isolated were 24 and 71 kDa. Proteins 24, 71 kDa and intestinal homogenates immunized in mice with the addition of adjuvant (1: 1) for 3 times with period of 2 weeks. Two weeks after the last booster, serum drawn from mice tested by Indirect ELISA to determine the value of optical density (OD). The next stage, mice were infected L2 with a dose of 10-17 larvae / g of body weight. The results showed the average OD value antigen P24 was not significantly different with antigen P71 *T. vitulorum*. Antigen 24 kDa and 71 kDa with different immunization, both were showed P0 significantly different with P1, P2 and P3. Based on percentage of L2 in the somatic tissue of mice, P0 were showed 79.1% of total number of L2 early infection, whereas the treatment of P1 were showed 0.04%, P2 and P3 showed as much as 0.02% and 0.04%.

*Keywords*: *Toxocara vitulorum*, protein 24 kDa, protein 71 kDa, Larvae 2, protection