

Characterization of Antigenic Protein Profile of *Anisakis* spp. Larvae that Infected Mackerel Tuna Fish (*Euthynnus* sp.)

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ABSTRACT

The purpose of this research to perform protein analysis and characterization on third stage larvae of *Anisakis* spp. which can stimulate the formation of antibodies to obtain an antigenic protein profile so it can be utilized for the development of diagnostics in cases of anisakiasis. Samples of third stage larvae *Anisakis* spp. taken from the gastrointestinal tract of mackerel tuna fish (*Euthynnus* sp.) from the Brondong Auction Market (TPI) of Brondong, Lamongan. Third stage larvae *Anisakis* spp. has been collected then crushed and added PBS to make homogenate and then synthesized and centrifuged at 5000 rpm for 5 min. The homogenate of *Anisakis* spp. was immunized to rabbit at a dose of 500 µg / rabbit subcutaneously with booster 4 times at 2 weeks intervals. The homogenate of *Anisakis* spp. was performed using the SDS-PAGE technique to analyze the protein with Coomassie blue staining. Antigenic protein of *Anisakis* spp. was characterized using by western blot technique and obtained 6 protein bands with molecular weight (BM) are 64 kDa, 45 kDa, 38 kDa, 30 kDa, 27 kDa and 23 kDa.

Keywords: *Euthynnus* sp., *Anisakis* spp., Third stage larvae, Antigenic Protein