Cross Reaction *Haemonchus contortus* Against Serum Anti-Mecistocirrus *digitatus* By Western blot Technique

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**ABSTRACT**

The purpose of this study to analyze protein cross-linking reaction of the protein results worm *Haemonchus contortus* with serum anti- *Mecistocirrus digitatus* using *Western blot* technique. *Haemonchus contortus* worms collected from the abomasums of goats and worms *Mecistocirrus digitatus* collected from the abomasums of cattle, and the manufacture of homogenates of whole worm extract and centrifuged at a speed of 3500 rpm. After that, the analysis of the protein profile of the worm using SDS-PAGE technique with *coomasie brilliant blue* staining. Making antibodies *Mecistocirrus digitatus* performed by injecting antigen *Mecistocirrus digitatus* worms in mice (*Mus musculus*), injection using antigen protein content of 0.7786 mg/ml. Booster 3 times with a span of two weeks with adjuvant and antigen ratio 1 : 1 and a blood draw done through mice. Cross reactions with the *Western blot* technique using homogenates of *Haemonchus contortus* worms 7µg, antibody of *Mecistocirrus digitatus* 1: 50, conjugated anti- mouse IgG Alkaline Phospatase 1 : 30.000 with conjugate substrate BCIP-NBT. The results of the analysis of the reaction cross reactions obtained nine protein bands are 107.74, 72.88, 64.68, 51.39, 43.52, 38.55, 32.97, 28.95, 15.65 kDa.

**Keywords:** *Haemonchus contortus*, *Mecistocirrus digitatus*, Cross Reaction, Western blot