

**DETECTION OF *Aeromonas hydrophila* IN KIDNEY'S MICE (*Mus musculus*) WITH IMMUNOHISTOCHEMISTRY TECHNIQUE**

**ABSTRACT**

This research was aimed to determine whether the *Aeromonas hydrophila* can be detected by using immunohistochemistry technique. Immunohistochemistry was a process to detect antigens (proteins, carbohydrates, etc.) towards the cells of the tissues with antibodies reaction principle that binded to antigen in the tissues. The parameter of this research was an interaction between antigens and antibodies which were visualized by the appearance of brown color in the kidneys which were infected by *Aeromonas hydrophila*. The three-month old mice (*Mus musculus*) with 30 grams of weight were infected by *Aeromonas hydrophila* with  $10^6$  CFU/ml of doses. After a week, the kidneys were prepared for histopathology preparation by using immunohistochemistry staining. The primary antibodies used were rabbits' antibodies (*New zealand white*) with two treatments (P1 and P2). P1 was infected by using specific proteins of *Aeromonas hydrophila* 30 kDa and P2 was infected by using the *whole proteins* of *Aeromonas hydrophila*. The results were showed by comparing P1 and P2. The results showed that there was a difference in the brown color which was more through in P2 compared to P1.

**Keyword:** *Aeromonas hydrophila*, Mice (*Mus musculus*), Antigens, Immunohistochemistry Technique.