ABSTRACT

The Detection of Mutation of Avian Influenza H5N1 Shedding Virus by Using SDS PAGE and Western Blot

Ratnani Sri Hayati

Avian influenza (AI) belongs to infected disease in animals and humans that is caused by influenza virus type A. The aim of this research was to figure out either the protein of H5N1 avian influenza virus from shedding in poultries and mammals undergo such mutation or not and to know the type of protein that is mutated protein of avian influenza H5N1 virus shedding results in poultry and mammals. The sample used in this research was shedding virus from mammalian and poultries obtained from nasal swab, nasopharyngeal, and nasal wash. SDS PAGE and Western blot were used as the research methods. The research showed that H5N1 avian influenza virus from shedding in poultries and mammals have undergone mutation and protein mutated H5N1 avian influenza virus in chickens shedding results were HA protein (60-80 kDa), NA (36-60 kDa), PA (80-85 kDa), PB2 (86-100 kDa), and M1 (30-35 kDa). Protein mutated H5N1 avian influenza virus in ferrets shedding results were HA protein (60-80 kDa), NA (36-60 kDa), PA (80-85 kDa), PB2 (86-100 kDa), and PB1 (110-200 kDa) and protein mutated H5N1 avian influenza virus shedding results in monkeys are HA protein (60-80 kDa), NA (36-60 kDa), and PB1 (110-200 kDa).

Keyword: avian influenza, shedding virus, mutation, SDS PAGE, Western blot.