

VV356 - EXPRESSION OF RECOMBINANT P28 PROTEIN OF THE GOAT CAPRINE ARTHRITIS ENCEPHALITIS VIRUS IN ESCHERICHIA COLI

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Caprine Arthritis-Encephalitis virus is lentivirus responsible for causing a chronic, debilitating disease in goats. The objective of this study was to produce the recombinant p28 protein from the Caprine Arthritis Encephalitis Virus and express it in *Escherichia* bacteria and test the antigenic potential of the protein in the western blot test. The gag region of the gene that codes for the p28 protein of the virus was sub-cloned in pET32b. The best condition of the recombinant protein expression was tested at 37°C and room temperature using Isopropyl β-D-1-thiogalactopyranoside as inducer at concentrations of 0.5, 1 and 3 mM. The proteins were analyzed by electrophoresis in polyacrylamide gel to verify the result of the expression. The samples were submitted to immunoblotting to assess their antigenic potential. At 37°C, the bacteria expressed the protein at lower intensities and there was no expression at the concentration of 0.5 mM IPTG. At room temperature, at all the concentrations the protein was expressed and at 1 mM IPTG the protein presented great intensity. When analyzing the antigenic potential of the recombinant protein in immunoblotting, it reacted with positive goat serum presenting a strong characteristic band of 28 kDa. It was concluded that there was production of the p28 recombinant protein of the CAEV by the bacteria and this presented an antigenic potential that could be used as antigen in diagnostic tests.

Financial support: FUNECE/BNB; CAPES

VV357 - INFLUENZA VIRUSES IN DOGS FROM BRAZIL

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Concerns over interspecies transmission of influenza viruses, as well as the emergence of new pandemics, led to the first study on influenza viruses in domestic animals in 1970. Birds and mammals, including the man, are their natural hosts; however, other animals may also play a role in the virus epidemiology. Infection with an influenza A type virus originated in horses has been reported in dogs in the USA. The objective of this work was to investigate the incidence of influenza viruses in adult dogs raised in rural (9), 19.56% and urban (37) 80.43% areas in the state of São Paulo, Brazil. Dog serum samples were collected and were examined for antibodies to influenza viruses by the hemagglutination inhibition (HI) test using the corresponding antigens from the circulating viruses in Brazil. Nearly 90% (88.88%) of rural dogs presented protective titers of ≥ 40 HIU/25μL in response to human influenza A(H1N1). All rural dogs responded to human influenza A(H3N2), and equine influenza A(H7N7) and A(H3N8). About 84% (83.78%) and 91.89% of urban dogs responded to human influenza A(H1N1) and A(H3N2), respectively. About 92% and 100% of them were positive for A(H7N7) and A(H3N8), respectively. The means of HIU/25μL titer to influenza viruses were: 213.9, 179.42, 231.76, 231.35 to subtype A (H1N1) (H3N2) (H7N7) (H3N8), respectively, with no statistical difference ($P > 0.05$) of these means among urban dog sera. With referring to rural dog sera these means were: 94.37, 227.88, 168.14, 189.62 to subtypes A (H1N1), (H3N2), (H7N7), (H3N8), respectively, with statistical difference ($P < 0.05$) observed between the subtypes (H1N1) and (H3N2). In conclusion, our results indicate that both human and equine influenza viruses can be transmitted to dogs, which, like other mammals, may play a role in interspecies transmission and the spread of the viruses. The present study provides evidence, for the first time, that influenza viruses circulate among dogs in Brazil.

Financial support: Proc. CNPq Universal nº471876/2009/2010

VV358 - CIRCULATION OF INFLUENZA A SUBTYPE H3N2 VIRUS IN MIGRATING AND WILD BIRDS FROM ATLANTIC RAIN FOREST IN BRAZIL

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Avian Influenza virus belongs to Orthomyxoviridae family. The last years several low pathogenic avian influenza