

PURIFICATION OF ANTIGEN THE CAPRINE ARTHRITIS ENCEPHALITIS VIRUS BY AFFINITY COLUMN

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Abstract / Resumo:

The small ruminant lentiviruses are diseases characterized by a chronic, multisystemic and wasting nature. They are responsible for major production losses in goats and sheep. The control and eradication are very difficult, mainly by the absence of effective vaccines, lack of early detection of seropositive animals in herds, and dissemination in high value livestock. The clinical evaluation is not sufficient to determine the disease, since the major signs can be confused with other illnesses. Among the serological methods to diagnosis are the agar gel immunodiffusion, immunoblotting and the enzyme linked immunosorbent assay (ELISA). This study aimed to purify the proteins of CAEV by column bioaffinity. In assembling the column were used from both the seropositive sheep as seropositive goats from different regions, northeast and southeast of Brazil. In immunoblotting of purified antigen was found four antigenic proteins and approximate WM: 145 kDa, 46 kDa, 28kDa and 19kDa. In ELISA it was observed that the serum dilution of 1:200 and 200ng of antigen showed a difference between the OD sera positive and negative of about 0.5. This result enables the development of this test. Considering the results it was found that the use of affinity chromatography is a viable alternative, especially when one need a hoghly purified antigen.