THE TRIAL OF EXPERIMENTAL TEST-SYSTEM FOR THE SPECIFIC DIAGNOSTICS OF CATTLE TUBERCULOSIS

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The aim of the research was the experimental investigation of test-system on the panels of blood serum from healthy, leukemic, and experimentally infected with various Mycobacterium species cows. The results of serological testing of biological samples from cattle infected with different strains of Mycobacterium are presented. The analysis of informative indicators (sensitivity and specificity) of test system for the diagnosis of tuberculosis based on the determination of the immunoglobulins G to bovine tuberculosis pathogen Mycobacterium bovis, was done using chimeric recombinant protein MPT83(115-220)-MPT63 as an antigen. Above-mentioned recombinant protein is based on antigens of M. bovis/M. tuberculosis and achieves high sensitivity and specificity of the test system because it reduces the likelihood of false positive results caused by infection with atypical mycobacteria. The developed test system «IB-Chem Anti-Mycobacterium bovis» was tested at the State Scientific Control Institute of Biotechnology and Strains of Microorganisms and is recommended for use.

**Key words:** tuberculosis, cattle, recombinant proteins, test system.

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