The invention relates to medicine, in particular to laboratory medicine, and can be used for determining the etiology of pulmonary pathologic process, differential diagnosis of pulmonary tuberculosis and with the object of developing methods of treatment.

Summary of the invention consists in the preparation of double test, control, blank and standard samples, namely in the test sample is used the sputum taken from the patient and an incubation medium, comprising 7.5…12.0 mM of adenosine with a final concentration of 2.3…3.7 mM/L dissolved in 0.05 M potassium phosphate buffer solution with pH 7.4; in the control sample is used the sputum taken from the patient and an incubation medium, comprising 0.05 M potassium phosphate buffer solution with pH 7.4; in the blank sample is used physiological saline and an incubation medium, comprising 7.5…12.0 mM of adenosine with a final concentration of 2.3…3.7 mM/L, dissolved in 0.05 M potassium phosphate buffer solution with pH 7.4; the standard sample is prepared in a similar way, but the test sample is replaced with a standard ammonium sulfate solution, after which the samples are incubated at 37°C, for 30 min, then a mixture comprising 1% phenol and 0.5 mM sodium nitroprusside solution is added to the samples, followed by the addition of a 10% Na_3PO_4 solution comprising 10 mM sodium hypochlorite to stop the enzymatic reaction, then the samples are incubated at 37°C, for 30 min; after the incubation is measured the absorption of the prepared samples at a wavelength of 630 nm, then is determined the adenosine deaminase activity, the protein concentration in the test sample, the adenosine deaminase specific activity, the percentage concentration of lymphocytes in the peripheral blood of the patient and is determined the coefficient K, and if the coefficient K is greater than 19.7, the pulmonary tuberculosis is diagnosed.

Claims: 1