



INFECTIOUS MONONUCLEOSIS

Rapid latex test for qualitative and quantitative determination of **INFECTIOUS MONONUCLEOSIS** in human serum

Cat.No. 101-0147

Size 20 tests

PRINCIPLE:

Infectious Mononucleosis Latex Slide Test provides a suspension of polystyrene latex particles which are coated with partially purified glycoprotein from bovine red blood cells. The heterophilic antibody associated with infectious mononucleosis binds to the corresponding antigenic determinants on the glycoprotein coated latex. This binding is evident by rapid agglutination of the latex. Due to the purification of the bovine red cell glycoprotein the coated latex is not agglutinated by Forssman or serum sickness antibodies at levels normally encountered. Therefore, no differential absorption is required.

SAMPLE:

Serum. Use only fresh serum or serum stored at +2°C to +8°C for no longer than 72 hours. For longer storage freeze the serum. Reject any lipemic serum.

REAGENTS:

1. Latex reagent (White dropper)
2. Positive Control (Red dropper)
3. Negative Control (Blue dropper)
4. Disposable slide

All reagents and controls are ready for use and stable up to the expiry date when stored at +2°C to +8°C. Do not freeze any of the reagents. Shake the latex reagent well before use.

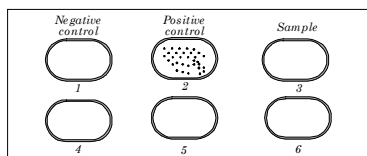
PROCEDURES:

1. QUALITATIVE DETERMINATION

Bring all reagents and samples to room temperature before use.			
Place successively on the slide on field #1, #2, #3			
	Negative Control	Positive Control	Sample
Control	50 µl	50 µl	-
Sample	-	-	50 µl
Latex reagent	50 µl	50 µl	50 µl
Mix and spread over the test area with separate sticks. Rotate the slide and observe for any agglutination within 3 minutes under direct light.			

INTEPRETATION OF RESULTS:

The test is considered as negative when no difference in agglutination is observed between specimen and negative control. The positive control and positive sera must show distinct agglutination within 3 minutes.



. SEMIQUANTITATIVE DETERMINATION

Prepare dilutions of the samples with 0.9% sodium chloride solution (saline).					
Dilution	1:2	1:4	1:8	1:16	or is needed
Sample dilution	45 µl	45 µl	45 µl	45 µl	45 µl
Latex reagent	45 µl	45 µl	45 µl	45 µl	45 µl
Mix and spread over the test area with separate sticks. Rotate the slide and observe for any agglutination within 3 minutes under direct light. The serum titer is defined as the highest dilution showing a positive result.					

CLINICAL SIGNIFICANCE:

Paul and Bunnell were the first to report that serum from a patient with infectious mononucleosis (IM) contained heterophile antibodies which agglutinated sheep erythrocytes. These heterophile antibodies react with an antigen which apparently is not responsible for their production. Although IM slide Latex Reagent is highly sensitive and specific, a diagnosis of infectious mononucleosis should not be made only on the basis of a positive test result without the support of patient history and hematological or other clinical evidence. Similarly a negative test result can not completely rule out infectious mononucleosis. Although most patients develop heterophile antibodies within 3 weeks of the onset of symptoms, some patients may take several months to develop detectable levels. If the IM Test is negative, in the presence of strong evidence suggesting a diagnosis of infectious mononucleosis, repeat testing on samples obtained at intervals of several days, this will generally reveal development of the heterophile agglutinin. Some patients with hematological and clinical evidence of infectious mononucleosis remain persistently negative. A single heterophile antibody titer can not be interpreted as an indication of the stage or severity of the disease. However, titrations on sequential may be useful in following the course of the disease in an individual patient.

NOTES:

1. Plasma, lipemic serum or microbial contamination may cause non specific agglutination.
2. Reaction times longer than 3 minutes may produce false positive results.
3. The reagents and controls contain sodium azide as preservative. Avoid ingestion or contact with skin or mucous membranes.
4. The reagents containing sodium azide may combine with copper and lead plumbing to form highly explosive metal azides. Dispose of reagent by flushing with large amounts of water to prevent azide buildup.
5. The positive and negative controls were prepared from human sera which have been tested using FDA approved methods and found to be non-reactive for HBsAG and HIV antibodies. However, no test can offer complete assurance that human HIV virus, hepatitis B virus or other infectious agents are absent. Hence the reagent should be handled with the same care as clinical specimen.

REFERENCES:

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3. Davidsohn, J., J.A.M.A. 108:289, 1937.
4. Balley, G.H. and Raffail, S., J., Clin. Ivest. 14: 228-244.
5. Fletscher, M.A. and Wolfolk, B.J., J. Immunol. 197:380.