

HiPer[®] RPR Test Teaching Kit

Product Code: HTI020

Number of experiments that can be performed: 20

Duration of Experiment: 1hour

Storage Instructions:

- The kit is stable for 12 months from the date of manufacture
- Store the RPR Antigen, positive and negative control at 2-8 °C
- Other kit contents can be stored at room temperature (15-25°C)

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Aim:

To perform the RPR Test for the detection of syphilis.

Introduction:

The Rapid Plasma Reagin (RPR) is a macroscopic flocculation test which detects the presence of reagin antibody in the serum of a patient suffering from syphilis. During this test method reagins form visible flocculants upon reacting with the carbon-containing RPR antigen.

Principle:

Syphilis is a sexually transmitted (venereal) disease caused by the spirochete *Treponema pallidum*. It is a Gram-negative spirochaete bacterium with subspecies that cause treponemal diseases like syphilis, bejel, pinta and yaws. Two types of antibodies are produced in response to this infection – the host forms specific anti-treponemal antibodies to *Treponema pallidum* and anti-lipid antibodies in response to the lipoidal material released from the infected host cell which are referred to as reagins. In a serum sample containing reagin antibody, flocculation occurs due to agglutination of the carbon particles of the RPR antigens, which appear as black clumps against the white background of the card. This agglutination is observed macroscopically. The non-reactive specimens show an even light grey colour. This test does not look for antibodies against the actual bacterium, but rather for antibodies against substances released by cells when they are damaged by *T. pallidum*. HiPer® RPR Teaching Kit applies the above principle for rapid screening of patient samples suffering from syphilis by slide flocculation.

Kit Contents:

Table 1: Enlists the materials provided in this kit with their quantity and recommended storage

Sr. No.	Product Code	Materials Provided	Quantity	Storage
			20 expts	
1	TKC358	RPR Antigen	1.6 ml	2-8°C
2	TKC359	Positive control	0.6 ml	2-8°C
3	TKC360	Negative control	0.6 ml	2-8°C
4	TKC361	Disposable Slides	10 Nos.	RT
5	TKC125	Disposable Mixing Sticks	120 Nos.	RT

*** One agglutination card can be used for 2 experiments**

Materials Required But Not Provided:

Test Serum Sample, Micropipettes, Tips, Gloves and Masks.

Storage:

HiPer® RPR Test Teaching Kit is stable for 12 months from the date of manufacture without showing any reduction in performance. On receipt, store RPR Antigen, Positive control and Negative control at 2-8°C.

Important Instructions:

1. HiPer® RPR Test Teaching Kit should be used according to the kit instructions.
2. Allow all reagents to reach room temperature before use.
3. Do not dilute any of the kit reagents.
4. Do not intermix the reagents.
5. Do not freeze any of the kit reagents.
6. Ensure the Agglutination card is clean and dry prior to use.
7. Wear masks and gloves while handling the reagents.

Procedure:

1. Before starting the experiment, bring all reagents to room temperature and mix well.
2. Take 25µl of the test sample, positive control and negative control onto three different reaction circle of the disposable slide provided in kit.
3. Add 25µl of well mixed RPR reagent to test sample, positive control and negative control circles.
4. Do not touch the dropper tip to liquid on the slide.
5. Using a mixing stick, mix the test sample and RPR reagent thoroughly by spreading uniformly over the entire circle.
6. Repeat step 4 for Positive and Negative controls.
7. Rotate the slide gently and continuously for 8 minutes to observe flocculation.
- 8.

Observation and Result:

After mixing the RPR antigen with Positive control, Negative control and Test sample separately observe for visible flocculation.

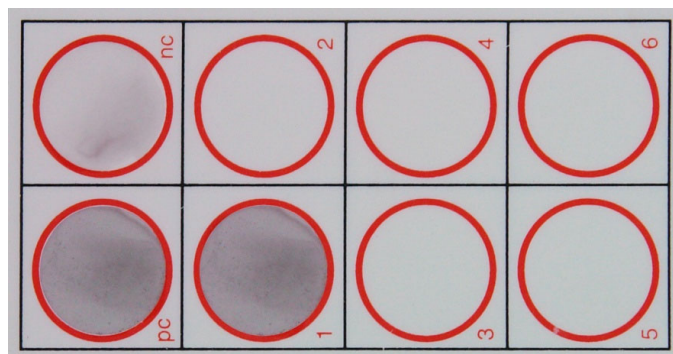


Fig 2: Flocculation for RPR antigen with Positive control, Negative control and Test sample

pc: Positive Control
nc: Negative Control
Circle 1: Test Sample

Interpretation:

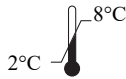
Flocculation in Test sample circle is considered a positive reaction, indicating the presence of treponemes at a significant and detectable level.

Troubleshooting Guide:

Sr.No	Problem	Possible Cause	Solution
1	False positive result	The reagents were mixed with each other	Ensure that the reagents are added properly onto the respective well without spilling to the sides
		Incubated for a longer time	The results should be read within the time period mentioned in the brochure
2	No flocculation observed	The reagents are not stored under proper conditions	Ensure that the RPR antigen, positive and negative control are stored in refrigerator (2-8°C)

Technical Assistance:

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance mail at mb@himedialabs.com



Storage temperature



Do not use if package is damaged



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