PATHOZYME DIAGNOSTICS

# *RAPICHEK* VDRL/RPR

## (SLIDE FLOCCULATION)

**CAT No.: RPR**

**Rapid Plasma Reagin (VDRL/RPR) Card Test Antigen For Syphilis In Serum Or Plasma.**

## DIAGNOSTIC SIGNIFICANCE:

Syphilis is caused by the infection of spirochetes *'Treponema palladium'* : It is most commonly transmitted sexually and by direct or indirect contact, sometimes through minute lesions on the skin or mucous membrane. In response to the infection, the host forms treponemal antibodies. It also forms non-treponemal antibodies against the lipoidal material released from the damaged host cells. These antibodies are called "Reagins"
The RPR (Rapid Plasma Reagin) carbon test as the name suggests is based on the detection of these "reagins."

## PRINCIPLE:

A suspension of modified cardiolipin coated on microparticulate carbon is used as an antigen against the "Reagin" (antibodies). The antigen reacts with "Reagin" in the sample to form black clumps or floccules indicating a positive test.

## SPECIMEN COLLECTION:

Fresh serum or plasma collected using EDTA, heparin or oxalate as an anticoagulant can be used. The sample may be stored at 2-8$^0$C for 5 days or at -20$^0$C for 4 weeks.

## KIT PRESENTATION:

| PACK SIZE | 50 Test | 100 Test | 5 ml | 10 ml |
|---|---|---|---|---|
| RPR Carbon Antigen | 1 Vial | 1 Vial | 1 Vial | 2 Vial |
| Positive Control | 1 Vial | 1 Vial | 1 Vial | 2 Vial |
| Negative Control | 1 Vial | 1 Vial | 1 Vial | 2 Vial |
| Disposable Slide Circle | 50 Nos | 100 Nos | 250 Nos | 500 Nos |
| Mixing Sticks | 50 Nos | 100 Nos | 250 Nos | 500 Nos |
| Sample Dropper | 50 Nos | 100 Nos | 250 Nos | 500 Nos |
| Needle Dropper | 1 Nos | 1 Nos | 1 Nos | 2 Nos |

Needle Dropper Use For Carbon Antigen Dispensing

## REAGENT STORAGE & STABILITY:

All reagents included in the kit are stable at 2-8$^0$C until the expiry date stated on the label.

## PRECAUTION:

1. Bring all the reagents and samples to RT before use.
2. Drying of the mixture at the periphery of the circle could lead to erroneous results.
3. The RPR Carbon Antigen should be shaken well prior to use, to ensure a homogeneous suspension of Carbon.
4. The source material used in the manufacturing of Positive control is tested for HBsAg & HIV antibodies and found to be negative. However, for better safety the control should be handled with proper care.
5. While dispensing Carbon Antigen, hold the Needle dropper vertically to ensure uniform drop size.
6. As with all diagnostic tests, the final diagnosis should be based on correlation of test results with other clinical symptoms & findings.

## PROCEDURE:

**(A) Qualitative Method:**

1.Allow the reagents and samples to reach room temperature. The sensitivity of the test may be reduced at low temperatures.
2.Place one drop **(50 µl)** of the sample and one drop **(50 µl)** of each positive and negative controls into separate circles on the slide test.
3.Swirl the Carbon Antigen gently before using and add one drop **(16 - 18 µl)** next to the sample, positive control & negative control by using the needle dropper provided with the kit. Do not let the dropper tip touch the liquid on the slide.
4.Mix the drops with a stirrer, spreading them over the entire surface of the circle. Use different stirrers for each sample.
5. Immediately start a stopwatch. Rotate the slide gently and continuously either manually or on a mechanical rotor at 100 r.p.m.

**Interpretation Of Results:**

1.Black floccules or clumps against white back ground – **Reactive / Positive**
2. Uniform greyish suspension with no floccules – **Non reactive / Negative**

**(B) Semi-quantitative Method:**

1.Dilute the specimen serially 1:2, 1:4, 1:8. 1:16 and so on by using normal saline.
2.Proceed for each dilution as in the qualitative method.
3. The titre is reported as the reciprocal of the highest dilution which shows a positive reaction.

## NOTE:

The RPR Carbon antigen test is basically a screening test. Being nonspecific, incidence of false positive is often found in many unrelated diseases like Malaria, Leprosy, Collagen diseases, Measles, Rubella to name a few.

## REFERENCE:


1. Pang Bom, Mary C., Isolation and purification of serologically active phospholipid from Beef heart, J. Biol, Chem., 143:247, 1942.
2. J. Venereal Disease inform., 27 : 169, 1946
3. Mc Grew B. E. et al., American Journal of Clinical Pathology, 50: 52, 1968.



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Expiry Date | IVD In-Vitro Diagnostics Use | Storage | Mfg. Date | LOT Batch Number | REF Catalogue Number | See Package Insert


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