

RPR (RAPID PLASMA REAGIN)



PRINCIPLE

The RPR antigen reagent consists of antigen coated with Carbon particles. When mixed with the sample consisting of antibodies, will produce visible Black particle lumps formation and is clearly observed. No lumps formation indicates no presence of antibodies to *Treponema pallidum*.

CLINICAL SIGNIFICANCE

Treponema pallidum is a causative agent for a chronic infectious disease called Syphilis. Primary mode of transmission of Syphilis is through sexual contact. Diagnosis of Syphilis is based on the detection of Reagin type of antibody employing Cardiolipin antigen. After infection two types of antibodies are produced in the host: A) Reagin antibodies B) *Treponema* antibodies.

SAMPLE COLLECTION & STORAGE

- Fresh clear serum is preferred
- Plasma collected with EDTA, Heparin or Oxalate may also be used

PRECAUTIONS

- Bring all reagents to room temperature and shake well before use
- Do not freeze the reagent or expose to extreme temperature
- Drying of the reagent and improper mixing of the reagent with sample leads to erroneous results
- Use of Positive and Negative controls provided enables greater proficiency of the results
- Reagent should be completely released from the dropper before capping to avoid drying and formation of flakes upon storage at 2-8°C

KIT CONTENTS & STORAGE

	50T	500T
VDRL Carbon Antigen	1 vial	1 vials
Positive Control	1 vial	1 vial
Negative Control	1 vial	1 vial
Accessories		
Disposable plastic slide	50 Nos	50 Nos
Sample dropper with teat	500 Nos	500 Nos
Mixing Sticks	50 Nos	50 Nos
Antigen Dropper	1 No	1 No

All reagents are to be stored at 2-8°C and stable till expiry date mentioned.

REAGENT PREPARATION

All reagents are ready to use

PROCEDURE

1. Place one drop of Serum, Positive Control, Negative Control in separate test circle of the disposable plastic slide.
2. After swirling the RPR antigen suspension, place one drop (approx 15-20 µl) in each circle
3. Mix well with the disposable mixing sticks provided
4. Rock the slide gently for 6 minutes and observe for appearance of BLACK particle Lumps

RESULTS

Medium & Large Aggregates	:	Positive
No Aggregates Visible smooth Appearance:	:	Negative

LIMITATIONS

In the condition like Malada, Leprosy, Collagen disease, Rheumatoid Arthritis, Infectious mononucleosis, Rubella, Mumps, Measles, Leptospirosis, Relapsing fever, the RPR cardiolipin may show biological false positive (BFP) reaction. In such cases reaction should be confirmed by the other *Treponema* test like *Treponema Pallidum* Immobilisation (TPI), etc

Bibliography :

1. NC. Dey, Medical bacteriology 6th Edition (1970) P: 360-396
2. Pertnoy J. (1963) Modification of Rapid Plasma reagin (RPR) card test for use in large scale testing Am. J. Clin. Path, 40 473-479.
3. Stevens R.W and Storeable E.J (1970), Clin Path. 53, 32