

## Rapid Syphilis Antibody Test - Cassette (Device)

**For In Vitro Diagnostic Use Only**
**Store at 4°C to 30°C**
**OVERVIEW**

Syphilis is a disease caused by a Bacterium *Treponema pallidum*. The disease is characterized by sores on body, skin rash, weight loss, fever etc. Syphilis is diagnosed by serological detection of antibodies to *Treponema pallidum*. ImmunoQuick Syphilis Antibody test is an immunochromatographic assay to detect antibodies to *Treponema pallidum* in human serum/plasma/whole Blood.

**INTENDED USE**

Rapid Syphilis Antibody test (Device) is an immunoassay for the rapid and visual detection of antibodies to *Treponema pallidum* in human serum or plasma or whole blood to aid in the diagnosis of Syphilis.

**PRINCIPLE**

After addition of the serum or plasma or whole blood sample to the sample well of the device containing a test strip, the sample moves on to the conjugate pad containing colloidal gold particles conjugated with recombinant *Treponema pallidum* antigens (17, 47kDa) and rabbit IgG. If the sample contains detectable levels of the syphilis antibodies it reacts with the gold conjugated recombinant *Treponema pallidum* antigens (17, 47kDa) to form a complex. This complex moves further and reacts with the recombinant *Treponema pallidum* antigens (17, 47kDa) coated as test line on the nitrocellulose membrane area to form a colored band (Test band). The unbound complex and the rabbit IgG conjugated colloidal gold particles move further to the goat-anti rabbit IgG coated control area to form a colored band (Control line). The appearance of test line and control line in respective area indicates the positive result. Appearance of only control line indicates a negative result. The control line acts as a procedural control. Control line should always appear if the test is performed as per the procedure and reagents are working properly.

**CONTENTS OF KIT**

1. Test Device
2. Desiccant pouch
3. Plastic Dropper
4. Package Insert

**OPTIONAL MATERIAL REQUIRED**

1. Stop Watch
2. Sample Container
3. Disposable gloves

**PRECAUTIONS/KIT STORAGE AND STABILITY**

1. Please read all the information in this package insert before performing the test. Pay particular attention to the position of the Control and Test lines.
2. Do not use after the expiration date printed on the foil pouch.
3. Store in the sealed pouch in a dry place in between temperature 4°C to 30°C. Do not freeze.
4. Do not use if pouch is torn or damaged.
5. Do not open the foil pouch until you are ready to start the test.
6. Keep out of the reach of children.

**WARNINGS**

1. Do not reuse the test.
2. Follow the instruction to get accurate results.
3. Use appropriate personal protective equipments.
4. Dispose off hygienically in biohazard waste.
5. Do not touch the membrane.
6. Treat used samples and tests as potentially infectious. Avoid contact with skin.
7. For in vitro diagnostic use. Not to be taken internally.
8. Do not eat the desiccant in the package.
9. Do not mix the specimen sample or interchange the different specimen.
10. The manufacturer and distributor of this product shall not be liable for any losses, liability, claims, costs or damages whether direct or consequential arising out of or related to an incorrect diagnosis.

**SPECIMEN COLLECTION**

1. Rapid Syphilis Antibody test (device) can be performed using serum or plasma or whole blood.
2. Testing should be performed immediately after the specimens have been collected.
3. Do not leave the specimen at room temperature for prolonged periods.

**TEST PROCEDURE**

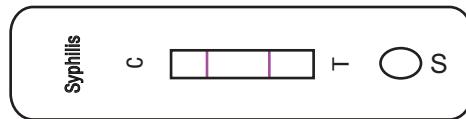
1. Before opening the foil pouch allow the test device and sample to reach room temperature (20°C to 30°C).
2. Remove the test device, plastic dropper and desiccant pouch from the pouch. Check the color of desiccant it should be blue, if it has turned colorless or pink, discard the test and use another test.
3. Add 2 drops (Approx. 60 µl) of serum or plasma or 3 drops (Approx. 90 µl) whole blood sample in well 'S'.
4. Start the timer.
5. Read the result at 15 minutes. Do not read the result after 20 minutes.

**INTERPRETATION OF RESULTS**

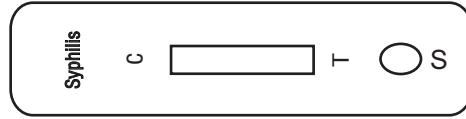
**Negative:** If colored line appears at the control side 'C' only.



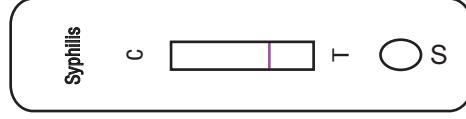
**Positive:** A distinct colored line appears at the control side 'C' and at the test side 'T'.



**Invalid:** The test should be considered invalid if,  
A) No line appears at 'C' and 'T' side.



B) No line appears at 'C' side and line appear only at 'T' side.


**NOTE:**

The intensity of the color in the test line region (T) will vary depending on the levels of the *Treponema pallidum* antibodies in the specimen. However, neither the quantitative value nor the rate of increase in *Treponema pallidum* antibodies in the specimen can be determined by this qualitative test. Depending on the levels of *Treponema pallidum* antibodies in the specimen, positive results may appear as early as two minutes. Negative results must be confirmed only at the end of 15 minutes.

## PERFORMANCE CHARACTERISTICS

### Internal Evaluation:

In an in-house study, total 290 samples were evaluated for sensitivity and specificity. We found the relative sensitivity was 100 % (i. e. 100/100) and the relative specificity was 100 % (i. e. 190/190).

The results are summarized in the following table:

Sample	Total Number of Samples Tested	Rapid Syphilis Antibody Test - Device		Sensitivity (%)	Specificity (%)
		Positive	Negative		
Syphilis Antibody Positive Serum Samples	50	50	0	100	-
Syphilis Antibody Positive Plasma Samples	30	30	0	100	-
Syphilis Antibody Positive Whole Blood Samples	20	20	0	100	-
Syphilis Antibody Negative Serum Samples	100	0	100	-	100
Syphilis Antibody Negative Plasma Samples	40	0	40	-	100
Syphilis Antibody Negative Whole Blood Samples	50	0	50	-	100

### External Evaluation:

In an external study, total 120 samples were evaluated for sensitivity and specificity. Relative sensitivity was 100 % (i. e. 20/20) and the relative specificity was 100 % (i. e. 100/100). Positive Predictive Value (PPV) and Negative Predictive Value (NPV) for the test was 100%.

The results are summarized in the following table:

Sample	Total Number of Samples Tested	Rapid Syphilis Antibody Test - Device		Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)
		Positive	Negative				
Syphilis Antibody Positive Samples	20	20	0	100	-	100	-
Syphilis Antibody Negative Samples	100	0	100	-	100	-	100

### LIMITATIONS

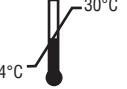
This test provides presumptive diagnosis of Syphilis. A confirmed syphilis diagnosis should only be made by a physician after all clinical and laboratory findings have been evaluated.

### DISCLAIMER

The all precaution shall be taken to ensure the diagnostic ability and accuracy of this product. This product is utilized outside the control of manufacturer and distributors. The various factors including storage temperature, environmental conditions and procedure error may affect the results. This test provides presumptive diagnosis of syphilis.

### REFERENCES

1. World Health Organization Technical Report Series. No.674 (1982) Treponemal infections.
2. Center for Disease Control. Recommendations for diagnosing and treating syphilis in HIV infected patients. MMWR Morb. Mortal Wkly Rep. 1988;37:601.
3. Marx AR. Crack, sex and STD, sexually Transmitted Disease, 1991;18:92-101.
4. Wasserheit JN. Epidemiological Synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases, Sexually Transmitted Disease 1992; 19:61:77.

<b>IVD</b>	In Vitro Diagnostic Use
	Manufacturer
	Manufacturing Date
	Expiry Date
<b>LOT</b>	Lot Number
	Store at 4°C to 30°C
	Single Use
	Number of tests in the pack
	Do not use if pouch or kit damaged
	This side Up
	Read package insert before use



### MANUFACTURED BY

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