

# FACT SHEET

## Syphilis Serology

### Rapid Plasma Reagin (RPR, qualitative) 5035

The SLO Public Health Laboratory performs a qualitative and semiquantitative nontreponemal flocculation test for the detection of reagin antibodies in human serum and plasma as a screening test in syphilis serology. Reactive test samples will automatically reflex to further confirmation testing.

Specimens accepted for testing:

Serum or EDTA Plasma sample removed from the red cells, free of hemolysis, bacterial contamination, or lipemia. Specimens may be stored up to 5 days at refrigerated temperature 2-8C before processing. If the RPR is reactive, a quantitative titer will automatically be performed. The following test is automatically added to the order.

### RPR, quantitative 5040

The RPR titer allows for the correction interpretation of the syphilis test and the automatic addition of the confirmatory test.

**Treponemal Passive Particle Agglutination Test ( TPPA) 5065** is ordered automatically with a positive RPR qualitative test.

### Interpretation

To determine if an active syphilis infection is occurring a patient's syphilis serology status requires consideration of the RPR, the RPR titer and the TPPA at the same time. The following is a general guide to interpretation:

Condition	Signs & Symptoms	RPR	RPR titer	TPPA
Syphilis infection	Primary or secondary syphilis signs ( chancre or rash)	Reactive	RPR 1:2- 1:256 range, and higher	Reactive
Past, treated syphilis	No signs or symptoms	Reactive or non-reactive	RPR 1:1, 1:2 occasionally higher	Reactive
Biologic false positive	Autoimmune disease, pregnancy	Reactive	RPR 1:1, 1:2	Non-reactive

### CPT Code

- RPR 86592
- RPR titer 86593
- TPPA 86780



## San Luis Obispo County Public Health Laboratory

Phone: (805) 781-5507 Fax: (805) 781-1023 [www.sloPublicHealth.org/lab](http://www.sloPublicHealth.org/lab)  
2191 Johnson Ave., San Luis Obispo, CA 93401  
Laboratory Hours: Monday – Friday, 8:00am – 5:00pm

# FACT SHEET

## Treponemal pallidum Particle Agglutination (TPPA)

Test 5065

### Test Description:

The SLO Public Health Laboratory performs the Serodia® -TP● PA test. It is specific for detecting *Treponema pallidum* antibodies in serum or plasma samples. It does not detect *T. pallidum* directly. As with all serological tests for syphilis, interpretation of results obtained with the Serodia® -TP●PA syphilis Antibody test must be used in conjunction with the patient's clinical symptoms, medical history and other clinical and/or laboratory finding to produce an overall clinical diagnosis.

Specimens giving inconclusive results in the assay should be re-tested. A repeated inconclusive specimen should be reported as Inconclusive and another specimen drawn in two weeks for testing and/or confirmed by other methods, such as FTA-ABS. The Serodia® -TP● PA is less sensitive than the fluorescent treponemal antibody absorption (FTA-ABS) in primary syphilis but compares favorably in all other stages of syphilis. All treponemal tests tend to remain reactive following treponemal infection: therefore they should not be used to evaluate.

**Sensitivity:** 70-90% primary syphilis  
90-99% secondary syphilis  
70-90% tertiary syphilis

**Specificity:** 95-99% primary syphilis  
90-99% secondary syphilis  
90% tertiary syphilis

Infection such as tropical trepanematosi (Yaws, Pinata, Bejel) are likely to result in a positive TP-PA test.

### Specimens:

Serum (specimen of choice) or EDTA Plasma sample removed from the red cells, free of hemolysis, bacterial contamination, or lipemia.

Specimens may be stored up to 5 days at refrigerated temperature 2-8C before processing.

**CPT Code 86780**



San Luis Obispo County Public Health Laboratory

Phone: (805) 781-5507 Fax: (805) 781-1023 [www.sloPublicHealth.org/lab](http://www.sloPublicHealth.org/lab)

2191 Johnson Ave., San Luis Obispo, CA 93401

Laboratory Hours: Monday – Friday, 8:00am – 5:00pm