

INTERPRETATION INFORMATION SHEET

Syphilis Serology

MHA-TP: This test is intended for the qualitative detection of *Treponema pallidum* antibodies in human serum or EDTA plasma. This agglutination test utilizes fixed chicken erythrocytes sensitized with components of the pathogenic *T. pallidum* to detect antibodies in specimens. A positive screening test should be confirmed with a more specific test for syphilis. Diagnosis of syphilis should not be made on a reactive result without the support of a positive history or clinical evidence.

FLUORESCENT TREPONEMAL ANTIBODY ABSORPTION TEST: The FTA-abs IFA test is designed for the qualitative determination of antibodies to *Treponema pallidum*, and is intended to be used as an aid in the confirmation of syphilis antibodies. False positive FTA-abs results have been reported in patients with hypergammaglobulinemia, lupus erythematosus, and pregnancy. Most of these reactions are usually borderline. Although the FTA-abs procedure is more specific, the relatively low incidence of false positive FTA-abs reactions emphasizes the need to interpret serological results in the light of the patient's complete history and clinical picture.

Occasionally, a "Reactive Minimal" (minimally reactive) result will be reported on a specimen. In this situation, a fresh serum specimen should be tested. If the result of the second specimen remains "Reactive Minimal", additional clinical information should be obtained prior to any decision on patient status.

SYPHILIS-G EIA: This enzyme immunoassay (EIA) detects the presence of IgG antibodies to *Treponema pallidum*. Detection of *Treponemal* antibodies may indicate recent, past or successfully treated syphilis infection. Results should be considered in the context of all available clinical laboratory data as false-positive results may occur.

Occasionally, an "Equivocal" result will be reported on a specimen. In this situation, a fresh serum specimen should be tested. If the result of the second specimen is again "Equivocal", additional clinical information should be obtained prior to any decision on patient status.

RPR: Rapid Plasma Reagin (RPR) is a non-Treponemal serologic test which utilizes a cardiolipin antigen to detect the presence of "reagin", an antibody-like substance present in serum or plasma from a syphilitic person, and occasionally in the serum or plasma of a person with other acute or chronic conditions not related to syphilis. Reactive specimens should be subjected to further serologic study such as Treponemal assay. Diagnosis of syphilis should not be made on a simple reactive result without the support of a positive history or clinical evidence.

QUANTITATIVE RPR: Serial dilutions of patient serum may be evaluated using the standard RPR (Rapid Plasma Reagin) test to determine the titer of reactivity for "reagin", an antibody-like substance present in the serum or plasma of a syphilitic person and occasionally in the serum or plasma of a person with other acute or chronic conditions. Changes in titer may then be monitored to provide useful information for establishing current infection and for evaluating treatment.

Revision History

Revision	Implemented	Reason
Initial Release	05/01/2013	Revision History added