
Lab Dept: Microbiology/Virology

Test Name: CHLAMYDIA TRACHOMATIS AMPLIFIED RNA ASSAY, MISCELLANEOUS SITES

General Information

Lab Order Codes: MCRNA

Synonyms: Chlamydia trachomatis by Nucleic Acid Amplification (Gen-Probe), oral/throat, ocular (corneal/conjunctiva), anal/rectal, peritoneal fluid

CPT Codes: 87491 – Chlamydia trachomatis, amplified probe technique

Test Includes: Target capture, transcription-mediated amplification, and dual kinetic assay. The detection of rRNA amplification product sequences (amplicon) is achieved using nucleic acid hybridization. Single-stranded chemiluminescent DNA probes are labeled and combine with amplicon to form stable RNA:DNA hybrids. Light emitted from the labeled RNA:DNA hybrids is measured as photon signals in a luminometer.

Logistics

Test Indications: Chlamydia trachomatis infection is the most prevalent sexually transmitted disease (STD) in the United States. The organism causes genitourinary infections in men and women, and some infected individuals may be asymptomatic. An estimated 3 out of 4 infected women and 1 out of 2 infected men will be asymptomatic initially. Chlamydial infection is the most common cause of acute salpingitis, and about 25% of women who develop acute salpingitis become infertile. Once detected, the infection is easily treated by a short course of antibiotic therapy.

Lab Testing Sections: Virology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test#: MCRNA)

Phone Numbers: MIN Lab: 612-813-5806

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days, performed daily

Special Instructions:

- Obtain special collection supplies based on type of specimen to be collected. Kits are stocked on patient units.

- Specimen site and date/time of collection are required for processing.

Specimen

Specimen Type: Oral/throat, ocular (corneal/conjunctiva), rectal/anal, peritoneal fluid

Container:

Obtain the following (stocked on patient units):

Oral/throat

Ocular (corneal/conjunctiva)

Rectal/anal

Peritoneal fluid

Supply T583 – Aptima Unisex swab specimen collection system



Volume: 1 swab from supply kit T583

Collection:

Miscellaneous Sources:

1. Swab site.
2. Remove the cap from the swab specimen transport tube and immediately place the specimen collection swab into the transport tube.
3. Carefully break the swab shaft at the score line; use care to avoid splashing of contents.
4. Re-cap the swab specimen transport tube tightly.
5. Label tube with 2 identifiers, including patient's entire name, source, and date and time of collection.

Transport/Storage:

Transport swabs at 2-27°C to the Laboratory. Once in the lab, refrigerate swab and forward to Mayo.

Special Processing:

Lab staff:

Oral/throat, ocular (corneal/conjunctiva), rectal/anal, peritoneal fluid swabs: Store at refrigerated temperatures and forward to Mayo for testing.

Sample Rejection:

Specimen not submitted in appropriate transport container; improperly labeled specimen; external contamination. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen requested before the specimen is discarded.

Interpretive

Reference Range:

No *Chlamydia trachomatis* detected

Limitations:

- This report is intended for use in clinical monitoring or management of patients; it is not intended for use in medico-legal applications.
- Appropriate specimen collection and handling is necessary for optimal assay performance.
- Results should be interpreted in conjunction with other laboratory and clinical information.
- A negative test result does not exclude the possibility of infection. Improper specimen collection, concurrent antibiotic therapy, presence of inhibitors, or low numbers of organisms in the specimen (ie, below the sensitivity of the test) may cause false-negative results.
- In low prevalence populations, positive results must be interpreted carefully as false-positive results may occur more frequently than true positive results in this setting.
- This assay cannot be used to assess therapeutic success or failure, since nucleic acids from these organisms may persist following antimicrobial therapy.
- No interference is expected due to blood (urine and swab) specimens or lubricants and spermicides (swab).
- The effects of use of tampons, douching, specimen types other than those listed and specimen collection variables have not been determined.
- This assay does detect plasmid-free variants of *Chlamydia trachomatis*.
- This assay does not detect *Chlamydia pneumoniae*.

Methodology:

Transcription Mediated Amplification (Gen-Probe)

References:

[Mayo Medical Laboratories](#) August 2015