Lab Dept: Microbiology/Virology

Test Name: MYCOPLASMA HOMINIS PCR

General Information

Lab Order Codes: MYHP

Synonyms: PCR, Mycoplasma hominis, Molecular Detection, Specimen Varies; Metamycoptoplasma hominis PCR

CPT Codes: 87798 – Infectious agent detection by nucleic acid (DNA or RNA), amplified probe technique

Test Includes: Rapid, sensitive PCR analysis of submitted specimen for detection of Mycoplasma hominis and reported as positive or negative.

Logistics

Lab Testing Sections: Microbiology - Sendouts

Referred to: Mayo Medical Laboratories (Test: MHRP)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 3 - 4 days

Special Instructions: Specimen site and date/time of collection are required for specimen processing.

Specimen

Specimen Type: Swabs: Cervix, Urethra or Vaginal; upper respiratory sources (only infants <3 months only: nasopharynx, nose, throat)

Fluids: Reproductive fluids, Respiratory specimens, pleural fluid, pericardial fluid, lung or synovial fluid

Urine, Kidney stones, Ureter, Tissue (placenta, Products of conception, Genitourinary, Respiratory, Wound)
Container: **Swabs:** Culture swab transport system (Dacron or rayon swab with aluminum or plastic shaft with either Stuart or Amies liquid medium)

Acceptable: Swab in transport media: M4, M4-RT, M5, M6, universal transport media, or ESwab. Note: Wooden shaft, cotton swabs are **not** acceptable.

**Fluids/Urine/Kidney stones/Tissue:** Sterile container

**Synovial fluid:** Lavender top (EDTA)

Draw Volume: **Swabs:** 1 swab

**Fluids:** 2 mL (Minimum: 1 mL) fluid

**Synovial Fluid:** 0.5 mL

**Urine:** 10 mL (Minimum: 2 mL) urine

**Kidney stones:** Entire specimen

**Tissue:** 5mm fresh tissue

Collection: **Swab specimens:** Do not collect specimens on wooden shaft swabs because the shaft is toxic to these organisms. ESwabs are acceptable.

**Cervical, Vagina, or Urethral Specimens:**
1. Obtain specimen from infected site on swab.
2. Collect vaginal or throat specimen by swabbing back and forth over the mucosa to maximize recovery of cells. Collect urethra and cervical specimen by inserting swab 1 cm to 3 cm and rotating 360 degrees.
3. Place the swab back into the swab cylinder and indicate specimen source on label.
4. Deliver to Laboratory immediately.

**Lab Staff:**
1. Write the specimen source on the label.
2. Send specimen refrigerated. Maintain sterility and forward promptly.

**Amniotic Fluid, Prostatic Secretions, Respiratory Specimens (<3 months old), Semen, Reproductive Drainage/fluid or Synovial Fluid:**

1. Collect specimen in a sterile container and deliver to laboratory immediately. Include specimen source.

**Lab Staff:**
1. Write the specimen source on the label.
2. Send specimen refrigerated. Maintain sterility and forward promptly.

**Urine:** Clean catch, Mid-stream specimen:
Males:
1. Clean glans with soap and water.
2. Rinse area with wet gauze pads.
3. While holding foreskin retracted, collect the first 2-10 mL from urine stream in a sterile container.
4. Send specimen to lab.

Lab Staff:
1. Maintain sterility, refrigerate specimen and forward promptly.

Females:
1. Thoroughly clean urethral area with soap and water.
2. Rinse area with wet gauze pads.
3. While holding labia apart, collect the first 2-10 mL from urine stream in a sterile container.
4. Send specimen to lab.

Lab Staff:
1. Maintain sterility, refrigerate specimen and forward promptly.

Kidney stones: Stone collection

Lab Staff:
1. Maintain sterility, refrigerate specimen and forward promptly

Tissue: Collection by physician or medical provider

Lab Staff:
1. Maintain sterility, refrigerate specimen and forward promptly

Transport/Storage: Transport all specimens to the lab at refrigerated temperatures.

Lab Staff:

Swabs: Swab in original swab cylinder.

Fluid specimens (other than urine): Place 1-2 mL fluid into a sterile container.

Urine: Send undiluted urine in sterile container

Kidney stone: Submit in sterile container

Tissue: Submit in sterile container.

All specimens should be refrigerated for transport to reference lab. Specimens are stable for 7 days.

Note: Swabs stored in M5 transport media will be accepted and tested, but the preferred specimen is a culture swab transport system (Dacron or rayon swab with aluminum or plastic shaft with either Stuart or Amies liquid medium).
Sample Rejection: Specimen not submitted in appropriate transport container; improperly labeled specimen; insufficient volume; external contamination; warm specimens; cotton or alginate-tipped swabs; transport swabs containing gel or charcoal; formalin-fixed and/or paraffin embedded tissues; Port-a-Cul tube; anaerobic fluid vials; fluids in viral transport medium; decalcified bone; slides; or dry swab. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range: Negative (reported as positive or negative)

Limitations: Interfering substances may affect the accuracy of this assay; results should always be interpreted in conjunction with clinical and epidemiological findings.

This test does not detect other mycoplasmas or ureaplasmas (including *Mycoplasma pneumoniae*, a common cause of community acquired pneumonia).

Methodology: Real-Time Polymerase Chain Reaction (PCR) using LightCycler and Fluorescent Resonance Energy Transfer (FRET)

Additional Info: *Mycoplasma hominis* causes genitourinary tract diseases. Importantly, infection of infants with *M. hominis* occurs during passage through an infected birth canal. Infection may result in neonatal meningitis and pneumonia. In adults, *M. hominis* is a recognized cause of acute pelvic inflammatory disease, postpartum fever and pyelonephritis.

References: [Mayo Clinic Laboratories](https://mayo.edu), October 2023

Updates: 8/13/2015: Added kidney stones and fresh tissue 9/29/2015: Added Plasma and Whole blood specimens 10/26/2023: Removed plasma and blood as specimen types (unique order codes are available); added synovial fluid as acceptable source; updated acceptable media for swabs and fluids, updated rejection criteria; added specimen stability.