Lab Dept: Microbiology/Virology

Test Name: MYCOPLASMA HOMINIS PCR

General Information

Lab Order Codes: MYHP

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

Metamycoplasma 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; Porta-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 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.