

## **TEST: MYCOPLASMA HOMINIS AND UREAPLASMA UREALYTICUM**

### **PRINCIPLE:**

*Mycoplasma hominis* and *Ureaplasma urealyticum* are species closely related to urogenital diseases such as pelvic inflammatory disease, bacterial vaginosis, adverse pregnancy outcomes, and post-delivery fever. Several different approaches have been used to detect *Mycoplasma hominis* including microbiological culture. EIA is also used for detection of antibodies to Mycoplasma species. However, PCR offers high sensitivity and the assay can be completed within one day. This test is based on the nested (two-stage) PCR method that amplifies the spacer between 16S and 23S rRNA genes of *Mycoplasma hominis*. Primers were obtained from ATCC Mycoplasma Detection Kit and the sequences were chosen from the conserved regions of *Mycoplasma* rRNA operons. Specific amplification of a 236 bp DNA can be visualized after second stage of amplification followed by gel electrophoresis.

### **SPECIMEN REQUIREMENTS:**

1. Endocervical and male urethral swab specimens can be collected and transported in 1 to 3 ml 2SP culture transport medium, Bartels ChlamTrans chlamydial transport medium (Bartels, Inc.), SPG culture transport medium, or M4 culture transport medium (Micro Test, Inc.). Use recommended methods for obtaining swab specimens after removing cervical mucus.
2. Use only dacron, rayon, or calcium alginate tipped collection swabs with plastic or non-aluminum wire shafts. Do not use collection swabs with wooden or aluminum shafts.
3. Leave swabs in the transport media. Seal the specimen container and label appropriately. Refrigerate swab specimens if transport to the laboratory is delayed for more than one hour from the time of collection.

**METHOD:** Polymerase Chain Reaction (PCR)

### **REFERENCE:**

1. J Med Microbiol 2000, 49(8): 697-700
2. Mol Cell Probes 1994, 8:139-48
3. Indian J Pathol Microbiol 1994, 37:293-8
4. Use and Interpretation of Laboratory Tests in Infectious Disease, 5<sup>th</sup> edition, 1998

**Reference Range:** See Laboratory Report

**Turnaround Time:** Two weeks