



## **Mycoplasma (Mycoplasma) pneumoniae Macrolide (Azithromycin) Resistance Prediction, Molecular Detection, PCR, Varies**

**Test ID:** RPMPM

**Useful for:**

Predicting macrolide susceptibility in *Mycoplasma (Mycoplasma) pneumoniae*

**Ordering Guidance:**

This test should only be ordered on specimens that have tested positive for *Mycoplasma (Mycoplasma) pneumoniae*. This assay predicts *M pneumoniae* macrolide (Azithromycin) resistance only.

For detection of *M pneumoniae* prior to macrolide resistance testing, order MPRP / *Mycoplasma (Mycoplasma) pneumoniae* with Macrolide Resistance Reflex, Molecular Detection, PCR, Varies.

**Methods:**

Rapid Polymerase Chain Reaction (PCR) using Light Cycler and Fluorescent Resonance Energy Transfer (FRET)

**Reference Values:**

Not Predicted

**Necessary Information:**

Specimen source is required; include the specific anatomic source.

**Specimen Requirements:**

The high sensitivity of amplification by polymerase chain reaction requires the specimen to be processed in an environment in which contamination of the specimen by *Mycoplasma (Mycoplasma) pneumoniae* DNA is unlikely.

**Submit only 1 of the following specimens:**

**Specimen Type:** Respiratory

**Supplies:** M4-RT (T605)

**Sources:** Bronchial washing, bronchoalveolar lavage, tracheal secretions, sputum

**Container/Tube:**

**Preferred:** Sterile container

**Acceptable:** Specimen in M4, M4-RT, M5, M6, or universal transport medium

**Specimen Volume:** 1 mL

**Specimen Type:** Swab**Supplies:**

- Culturette (BBL Culture Swab) (T092)
- BD E-swab (T853)
- Nasopharyngeal Swab (Nylon Mini-Tip Swab) (T861)
- Culture Swab-Liquid Stuarts/Single Swab (NP Swab) (T515)
- M4-RT (T605)

**Sources:** Throat, nasal, or nasopharyngeal**Container/Tube:****Preferred:** Culture swab transport system (Dacron or rayon swab with aluminum or plastic shaft with either Stuart or Amies liquid medium)**Acceptable:** Culture transport swab (Stuart's media) or place swab in M4, M4-RT, M5, M6, universal transport media, or ESwab**Specimen Volume:** Swab**Collection Instructions:**

1. Collect specimen by swabbing back and forth over mucosa surface to maximize recovery of cells.
2. Place swab back into swab cylinder.

**Specimen Type:** Fluid**Sources:** Pleural, pericardial, cerebrospinal**Container/Tube:** Sterile vial**Specimen Volume:** 0.5 mL**Specimen Stability Information:**

Specimen Type	Temperature	Time
Varies	Refrigerate (preferred)	7 days
	Frozen	7 days

**Cautions:**

This assay should only be used for testing of respiratory tract specimens (throat swabs, nasopharyngeal swabs, tracheal secretions, sputum, and bronchoalveolar lavage fluid) and pleural/chest fluid, pericardial fluid, and cerebrospinal fluid that has already tested positive for *Mycoplasma (Mycoplasmoides)pneumoniae* using a nucleic acid amplification test.

Test results should be used as an aid in the diagnosis. The single assay should not be used as the only criterion to form a treatment decision; results of this test should be correlated with clinical presentation and results of other laboratory tests. A negative result does not negate the presence of the organism or active disease.

Rarely encountered *Mycoplasma* species may be detected with this assay when present at high concentrations, however this assay is intended to be used as reflex for previously identified *M pneumoniae* positive samples. Therefore, cross reactivity with other *Mycoplasma* species is not a major concern.

This assay examines the two most common 23S ribosomal RNA single point variants associated with high-level macrolide resistance. Other mechanisms of macrolide resistance are not assessed nor are mechanisms of resistance to non-macrolide antimicrobial agents.

**CPT Code:**

87798

**Day(s) Performed:** Monday through Sunday

**Report Available:** 3 to 4 days

**Questions**

Contact James Conn, Laboratory Resource Coordinator at 800-533-1710.