

# Respiratory Viral Panel

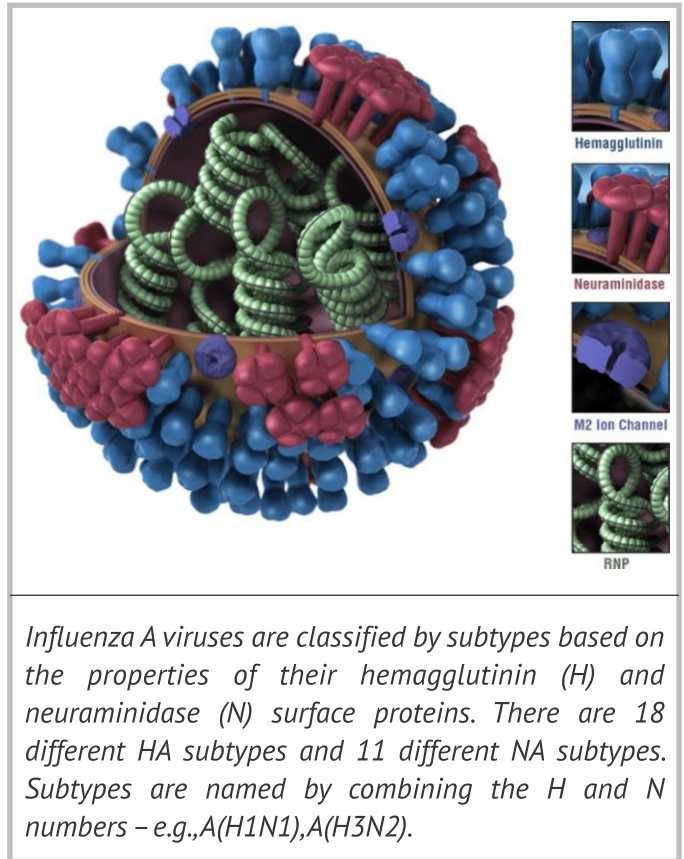
## Inf A, Inf B, RSV A, RSV B, H1N1, H1N1 (pdm09), H3N2 Detection of RNA

### PURPOSE

Respiratory Viral Panel 1 is a qualitative in vitro test for the single or multiple detection of Influenza A virus (Flu A), Influenza B virus (Flu B), Human respiratory syncytial virus A (RSV A), Human respiratory syncytial virus B (RSV B), Human Influenza A virus subtype H1 (Flu A-H1), Human Influenza A virus subtype H3 (Flu A-H3), and Human Influenza A virus subtype H1pdm09 (Flu A-H1pdm09) from clinical samples.

### CLINICAL SIGNIFICANCE

Symptoms for having influenza is nasal discharge, nasal congestion, sore throat, cough, fever, nasopharyngitis, chill and muscle pain, which are severe than regular cold. RSV is responsible for developing 45~75% of bronchiolitis, 15~25% of infant pneumonia, and 6~8% of croup. Infection with H1N1 and H3N2 subtypes of influenza A virus poses serious threat for respiratory collapse.



### PRINCIPLE AND METHOD USED

**Method** : Real-Time Polymerase Chain Reaction (Real-Time PCR).

**Principle**: Real-Time PCR is the most reliable method for sensitive and specific detection of target gene sequences present in the sample. DNA is extracted from samples, amplified using Real-Time amplification and detected using fluorescent reporter dye probes specific for targeted viruses. The assay includes a heterologous amplification system (Internal Control) to identify possible PCR inhibition and to confirm the integrity of the reagents used.

### SAMPLE REQUIREMENTS

Nasopharyngeal aspirate, naso-oropharyngeal swab, and bronchoalveolar lavage specimens. Storage at 2-8°C upto 3 days. Transportation at 2-8°C

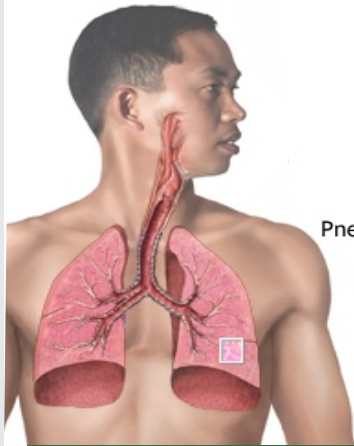
### TURN-AROUND TIME (TAT)

Within 12-24 hours.

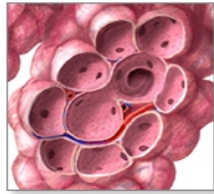
### REFERENCES

D.H.Lee. TOCE: Innovative Technology for High Multiplex Real-time PCR. Seegene Bulletin. (2012) 1: 5-10

# Pneumonia Respiratory Panel (Bacterial)



Normal alveoli



Pneumonia



## PURPOSE

Respiratory Panel (Bacterial) is a qualitative in vitro test for single or multiple detection of *Chlamydomphila pneumoniae* (CP), *Mycoplasma pneumoniae* (MP), *Legionella pneumophila* (LP), *Bordetella pertussis* (BP), *Bordetella parapertussis* (BPP), *Streptococcus pneumoniae* (SP), and *Haemophilus influenzae* (HI) from clinical samples.

## CLINICAL SIGNIFICANCE

Typical pneumonia is characterized by an abrupt onset, high fever, chills, productive cough, thoracic pain, leukocytosis etc. caused due to *Streptococcus pneumoniae* (SP), and *Haemophilus influenzae* (HI). Atypical pneumonia is characterized by a progressive onset, fever without chills, dry cough, headache, myalgia, modest leukocytosis, etc. caused by *Chlamydomphila pneumoniae* (CP), *Mycoplasma pneumoniae* (MP), and *Legionella pneumophila*.

## PRINCIPLE AND METHOD USED

**Method** : Real-Time Polymerase Chain Reaction (Real-Time PCR).

**Principle** : Real-Time PCR is the most reliable method for sensitive and specific detection of target gene sequences present in the sample. DNA is extracted from samples, amplified using Real-Time amplification and detected using fluorescent reporter dye probes specific for targeted bacteria. The assay includes a heterologous amplification system (Internal Control) to identify possible PCR inhibition and to confirm the integrity of the reagents used.



## SAMPLE REQUIREMENTS

Nasopharyngeal aspirate, naso-oropharyngeal swab, bronchoalveolar lavage and sputum specimens. Storage at 2- 8°C upto 3 days. Transportation at 2- 8°C

## TURN-AROUND TIME (TAT)

Within 24 Working Hours.

## REFERENCES

Erin A. et al. Multiplex PCR for detection of *Mycoplasma pneumoniae*, *Chlamydomphila pneumoniae*, *Legionella pneumophila*, and *Bordetella pertussis* in clinical specimens. *Molecular and Cellular Probes*. (2005) 19: 314-322