Legacy Laboratory Services

Respiratory Virus Panel by PCR

November 2012

Legacy Laboratory Services is now offering a comprehensive respiratory virus panel, FilmArray RP, targeting Adenovirus, Coronavirus HKU-1, Coronavirus NL63, Influenza A (including targets for H1, H3, and H1N1), Influenza B, Rhinovirus, Human Metapneumovirus, Respiratory Syncytial Virus, Parainfluenza 1, Parainfluenza 2, Parainfluenza 3, and Parainfluenza 4. FilmArray RP, manufactured by BioFire Diagnostics (formerly Idaho Technology, Inc.) utilizes nested multiplexed polymerase chain reaction technology to amplify and simultaneously detect multiple viral targets.

Multiplex PCR for 12 Respiratory Viruses

Testing will be performed in the Legacy Central Microbiology Laboratory, and turn-around time is up to **24 hours**, depending upon when specimens are received. Sample types accepted include **nasopharyngeal swabs**, **nasal washes**, **and bronchial washes**.

Test results are a diagnostic aid and should not be used as the sole basis for diagnosis, treatment or other management decisions. Negative results do not preclude respiratory viral infections below assay limits of detection and positive results do not exclude the possibilities of co-infection with other viruses, concurrent bacterial infections, or non-infectious pulmonary pathology. Clinicians should be aware that the cost for this test is substantial, running approximately 5X greater than more directed PCR's and 3X more than the DFA panel.

Legacy continues to offer Influenza AB PCR (without detection of other respiratory viruses), rapid EIA methodologies for Influenza and RSV, Direct Fluorescent Antibody (DFA) stains for respiratory viruses, and viral culture.

References

- 1) Beck ET and Henrickson KJ: Molecular Diagnosis of Respiratory Infections. Future Microbiology 2010;5(6):901-916.
- Rand KH, Rampersaud BS, Hauck HJ: A Comparison of Two Multiplex Methods for the Detection of Respiratory Viruses: FilmArray RP and xTAG RVP. JCM 2011.
- Idaho Technology Inc.: FilmArray Respiratory Panel Instruction Booklet. 2007-2011.

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Collection Guidelines

Description	Respiratory Virus Panel by PCR
Order mnemonic	RVP PCR
Targets	Influenza A, Influenza A H1, Influenza A H3, Influenza A novel H1N1, Influenza B, Respiratory Syncytial Virus, Human Metapneumovirus, Adenovirus, Rhinovirus, Parainfluenza 1, Parainfluenza 2, Parainfluenza 3, Parainfluenza 4, Coronavirus HKU-1, and Coronavirus NL63.
Collection and handling	Nasopharyngeal swab in an M4 or M4RT viral transport, OR Nasal wash in a clean leak-proof container, OR Bronchial wash in a clean leak-proof container
Transport	2-8 degrees C
Rejection Criteria	Specimen sources other than those listed. Specimens exceeding the stability criteria listed above.
Performed	Sunday-Saturday 0700 to 1400
Turn-around Time	24 hours
Stability	Ambient: 4 hours Refrigerated: 3 days Frozen: 30 days
Reference Ranges	Not detected