

Test Highlight Information

# Respiratory infections by next-generation sequencing

## Explify™ Respiratory

Each year, more than one million patients in the United States alone are admitted to the hospital and treated for pneumonia and related symptoms.<sup>1</sup>

The laboratory work-up for pneumonia involves multiple tests, including cultures, microscopy, EIA, and PCR, the results of which may not be available for days or weeks. Current testing methods are limited to specific pathogens and can return negative results in up to 60 percent of pneumonia cases.<sup>2</sup>

ARUP co-developed Explify Respiratory in collaboration with IDbyDNA, [www.idbydna.com](http://www.idbydna.com), as a new tool for diagnosing pneumonia that combines the latest genome science with cutting-edge computer search technologies to bring precision medicine to infectious disease.

### Features

- Detects more than 200 common, rare, and novel bacterial, viral, and fungal pathogens in respiratory specimens
- Includes detailed, user-friendly enhanced report to help guide therapeutic decisions

### Benefits

- Identifies pathogens PCR and culture can miss.
- Enables hypothesis-free diagnosis.
- Provides a new option for very ill patients, or patients with suspicion of infection, whose results come back negative with traditional tests like culture and PCR.

Test Code	Test Name	Method
2013694	Explify Respiratory Pathogens by Next Generation Sequencing	Massively parallel sequencing

### For more information:

1. Top 20 pneumonia facts–2015. [www.thoracic.org/patients/patient-resources/resources/top-pneumonia-facts.pdf](http://www.thoracic.org/patients/patient-resources/resources/top-pneumonia-facts.pdf) (accessed on September 19, 2017).
2. Schlberg R, et al. Viral pathogen detection by metagenomics and pan-viral group polymerase chain reaction in children with pneumonia lacking identifiable etiology. *J Infect Dis* 2017; 215(9): 1407–15.
3. Spotlight on Test Utilization video: Metagenomics for Universal Pathogen Detection.
4. Graf EH, et al. Unbiased detection of respiratory viruses by use of RNA sequencing-based metagenomics: a systematic comparison to a commercial PCR panel. *J Clin Microbiol* 54:1000–07
5. More testing and ordering information is available at: [www.aruplab.com/topics/Explify](http://www.aruplab.com/topics/Explify)
6. Email inquiries to: [ProductManagersTechnical@aruplab.com](mailto:ProductManagersTechnical@aruplab.com)



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