

Respiratory infectious disorders

General:

There are 2 possibilities for the determination of respiratory infectious disorders in routine diagnostics:

- 1) the indirect determination by antibody detection in blood;
- (2) the **direct microorganism determination by PCR** or antigen detection by monoclonal antibodies.

Antibody determination: The antibody determination offers the advantage of simple collection and short turnaround time of 1-3 days. However a fresh infection, depending on the microorganism, is detectable only 5-14 days after disease manifestation, since corresponding antibodies are not detectable at sufficient quantities earlier. Due to fresh infections with other microorganisms unclear (cross-reactions!) results are frequently observed. Clarification is only possible by monitoring over 7-14 days.

It is now possible to detect multiple infectious agents in one assay using only one throat swab. This not only saves time and money but will provide you with many results at once.

Multiplex technology allows a large number of tests to be conducted simultaneously and analyzed quickly, cost-effectively and accurately. This means multiple targets can be detected in a single sample. The bioassays are run with color-coded beads, known as microspheres. These are labeled with antibodies, antigens or oligonucleotides, which are then read in an analyzer. The system combines advanced fluidics, optics and digital signal processing to provide this multiplex assay platform.

The **respiratory virus panel** screens for several viruses and subtypes in one assay based on viral DNA/RNA isolated from nasopharyngeal swabs from individuals suspected of respiratory tract infections. Only one throat swab is required to test for the following:

The viruses, which are covered by the test are:

Influenza viruses (A and B)

Respiratory Syncytial Virus (RSV)

Human Metapneumovirus (hMPV)

Adenovirus

Corona virus (NL63, 229, OC43, HKU1)

Parainfluenza virus (1, 2, 3, and 4)

Rhinovirus

Material: throat swab

TAT: 7-10 days*

Method: Multiplex technology

Ref.range: negative

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit
<http://www.fml-dubai.com/parameter-listings/>