



Information on the SARS-CoV-2 * LineBlot

SARS-CoV-2 belongs to the coronavirus family and, like SARS-CoV, is classified in the genus Betacoron-avirus. At the end of 2019, SARS-CoV-2 was identified as the causative agent of frequent pneumonia with an unclear cause.

The virus is mainly transmitted through droplet infection when coughing or sneezing and aerosols.

After contact with the mucous membrane, the virus penetrates the body cells and begins to multiply. After a few days the viruses appear in the saliva and nasal mucus of the infected person. The incubation period is normally three to seven days, with a maximum of 14 days.

The diagnosis of a SARS-CoV-2 infection is determined by the detection of viral RNA via reverse transcriptase polymerase chain reaction (RT-PCR) or by the less sensitive detection of virus proteins in the ELISA.

Since the clinical symptoms do not occur in every infected person, an infection that has taken place or a successful vaccination can be determined by the detection of antibodies.

SARS-CoV-2 LineBlot

With the SARS-CoV-2 LineBlot, antibodies against SARS-CoV-2-specific antigens are detected separately. These allow:

1. evidence of a previous infection with SARS-CoV-2 in patients with common symptoms and people with an asymptomatic course of the infection.

Antibodies may decrease over time in people with a naturally acquired infection. If the antibodies against the spike proteins (S1 and S2) can no longer be detected, the viruses can again bind to the host's cells and fuse.

2. the detection of antibodies induced by immunization with vaccines approved in the EU (e.g. from Biontec / Pfizer, Moderna or Astra Zeneca).

The immune response desired by the vaccine does not have to occur in everyone. Especially in people of old age and who are taking immunosuppressants, the response to the vaccine is absent or incomplete.

*Severe Acute Respiratory Syndrome-Coronavirus 2