

INFORMATIVE MATERIAL CORONAVIRUS – SARS-COV-2 DIAGNOSTIC TESTS

Nucleic acid extraction is performed starting from sample in order to detect SARS-CoV-2 RNA through Real-Time Polymerase Chain Reaction (rRT-PCR).

Starting with an RNA template, a double-stranded DNA (cDNA) is obtained through a retro-transcription step and it is followed by an amplification process by PCR. More in details, the COVID19 molecular test is based on a “one-step” rRT-PCR, by which the retro-transcription and amplification steps are sequentially performed in the same reaction tube. This kind of diagnostic test has a high specificity based on primers and probes designed to target viral genome sequences. At each thermal cycle (Ct) during the amplification, a fluorescence signal is generated and detected.

Our lab employs World Health Organization (WHO) suggested diagnostic protocols (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance>) and CE-IVD certified kits.

REPORT RESULTS SARS-CoV-2 molecular test	WHAT DOES IT MEAN?	WHAT I HAVE TO DO?
Negative	No SARS-CoV-2 RNA detected.	<p>If you had a negative result after a positive serological test it means that you have been infected by SARS-CoV-2 but you are currently cured of the infection.</p> <p>If you went through an sample sampling because you have fever, it could be that either you are currently facing a disease not caused by SARS-CoV-2 or that the viral load is below the limit of detection of the assay.</p> <p>If the sample was tested for other reasons, the instrument did not detect SARS-CoV-2 viral RNA.</p> <p>In any case, please contact your medical doctor and share the results in order to critically analyze the outcome.</p>
Positive	SARS-CoV-2 RNA detected. The result is positive and you are subjected to 14 days of home quarantine. Contact your Medical Doctor or the local Health Authority	Contact as soon as possible your Medical Doctor or the local Health Authority. You have to stay confined until otherwise stated by your Medical Doctor or the local Public Health Authority. Stay away from other family members, if possible, in a well-ventilated single room and should not receive visitors.
Low Positive	SARS-CoV-2 RNA detected albeit at low levels. You are subjected to 14 days of home quarantine. Contact your Medical Doctor or the local Health Authority.	Contact as soon as possible your Medical Doctor or the local Health Authority. You have to stay confined until otherwise stated by your Medical Doctor or the local Public Health Authority. Stay away from other family members, if possible, in a well-ventilated single room and should not receive visitors.
Redraw requested	It was not possible to perform the analysis due to an inadequate sampling or due to the presence of inhibitory substances that damaged or degraded viral RNA. A new sample is needed.	You have to repeat the test.

Personal Data will be processed in compliance with current laws, as expressed in the privacy notice available at Synlab’s facilities.

If required by local law, in case of a positive result, the Public Health Authority may require SARS-Cov-2 genotyping.