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EUROIMMUN launches SARS-CoV-2 test system to detect T-cell response

January 15, 2021 | News

Novel test supports vaccine development studies critical to aiding researchers in understanding immunity levels and disease progression



PerkinElmer has announced that its EUROIMMUN business, based in Germany, has launched a SARS-CoV-2 Interferon Gamma Release Assay (IGRA) for Research Use Only (RUO) to determine the activity of T-cells reactive to SARS-CoV-2, the pathogen causing COVID-19.

Evidence suggests that both pillars of the immune system, antibody and T-cell response, are important in understanding immunity against SARS-CoV-2 reinfections. IgG antibodies against the S1 subunit of the SARS-CoV-2 spike protein and specific long-lived T-cells are suspected to play the most relevant roles in virus neutralization and sustained immunity.

This novel IGRA uses whole blood samples for determination of T-cell activity against SARS-CoV-2 through detection of interferon gamma, an important signaling molecule of the immune system which is released by the T-cells upon contact with the virus. The detection system is based on the well-established ELISA technology and can be processed manually or automatically in most laboratory settings. For this reason, the assay can be a helpful tool in research studies evaluating the cellular immune response in SARS-CoV-2 infected or vaccinated individuals.

“There are still a lot of open questions with respect to the COVID-19 disease progression and the development of long-term immunity after infection or vaccination,” said Dr. Wolfgang Schlumberger, CEO of EUROIMMUN. “In order to help answer these questions, both the IGRA and our Anti-SARS-CoV-2 QuantiVac™ ELISA (IgG) allow researchers to study the immune response to the coronavirus much more comprehensively and broadly to learn about vaccine efficacy from different angles.”

The IGRA for RUO is the latest addition to EUROIMMUN’s comprehensive SARS-CoV-2-specific product portfolio, which includes real-time PCR tests, an antigen detection assay and multiple antibody tests, a dried blood spot solution, as well as automation systems for small, medium and high sample throughput.