

Eurofins launches quantitative IgG assay to identify SARS-CoV-2 Abs

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Eurofins has launched a new CE marked serological assay for the identification and quantification of antibodies to SARS-CoV-2. This ELISA kit can support vaccination campaigns by confirming the success of vaccination and monitoring the antibody levels over time.

Vaccination against COVID-19 is a critical element in the fight against the pandemic. The spike protein covers the surface of the SARS-CoV-2 virus and is responsible for attachment and invasion of human cells. All currently approved vaccines use the spike protein to train the immune system to detect and neutralise this virus.

The GSD NovaLisa® SARS-CoV-2 (COVID-19) quantitative IgG is an ELISA assay designed to mimic this target by using the native, trimeric form of the spike protein and detect all long-lasting IgG antibodies raised by a vaccination or natural infection. A standard curve allows for quantification to monitor if antibody levels increase or decrease over time.

Supplementary to vaccination monitoring, the kit shows excellent clinical performance in detecting antibodies raised naturally by a true SARS-CoV-2 infection. 15 days after symptom onset, the assay identifies antibodies to the spike protein in 97 per cent of patients with a PCR confirmed infection. A diagnostic specificity of 99.94 per cent was validated with over 500 samples from healthy controls.

Validation of the test with capillary blood samples enables the use with self-sampling devices for less invasive and more comfortable sample collection that could simplify large scale screening programmes.