## thermo scientific

# Thermo Scientific EliA SARS-CoV-2-Sp1 IgG Test

## An assay designed to support global efforts to understand the COVID-19 pandemic

Quantitative measurement of IgG antibodies to the SARS-CoV-2 spike (S) S1 protein, with all of the benefits of Thermo Scientific<sup>™</sup> EliA<sup>™</sup> test technology on the fully automated Thermo Scientific<sup>™</sup> Phadia<sup>™</sup> 250 laboratory system.

## Quantitative IgG results can be useful for many applications



- N Trac
  - Tracking antibody trends in patients over time<sup>1</sup>

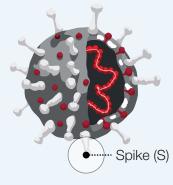


## The value of S-protein diagnostics and IgG detection



## IgG antibodies

 Antibodies of this isotype persist post-symptom onset and are likely important for long-term immunity.<sup>3</sup>



#### S protein

- The major surface protein that SARS-CoV-2 uses to bind to a receptor and invade cells.<sup>4</sup>
- The major target of many vaccine approaches, with the goal of eliciting neutralizing antibodies.<sup>5</sup>



RBD

- The major target of neutralizing antibodies.<sup>6-9</sup>
- A unique region with less similarity to other coronaviruses, which helps eliminate crossreactivity and improve assay specificity.<sup>10</sup>



Results you can trust: Exceptional clinical performance in diverse samples\*

- **100% sensitivity eight days after a positive PCR test** observed in a study of 65 subjects who presented with moderate-to-severe COVID-19 symptoms.
- **99.7% specificity** in 330 ethnically diverse samples from age- and gendermatched pre-pandemic blood donors.
- **No cross-reactivity** was detected when using the EliA SARS-CoV-2-Sp1 IgG Test to test 747 specimens from people with infectious or autoimmune diseases ranging from influenza and HIV to other human coronaviruses.
- \* Demonstrated in experiments for IVD CE Marking.

## Seamless integration onto the Phadia 250 laboratory system

- Full automation, including dilutions.
- Minimal hands-on system prep time and long walkaway times.
  - On-board reagent storage.
  - Ready-to-use reagents.
- A shared 28-day stable calibration curve with over 20 other EliA IgG tests, including all EliA tests for Connective Tissues Diseases as well as EliA CCP.



Product	Article No.	Kit Size	Description
Thermo Scientific EliA SARS-CoV-2 Sp1 IgG Test	14-6663-01	4 carriers (16 wells each); sufficient for 64 determinations	Fluoroenzymeimmunoassay (FEIA) intended for quantitative detection of IgG antibodies to SARS-CoV-2 spike 1 in human serum and plasma (Li-heparin, EDTA)
EliA CoV Positive Control C1 250	83-1185-01	6 single-use vials (0.3 mL each); sufficient for 2 determinations per vial	Control containing IgG antibodies to SARS-CoV-2 spike 1 protein

#### References

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- 4. Pillay TS. Gene of the month: the 2019-nCoV/SARS-CoV-2 novel coronavirus spike protein. J Clin Pathol. 2020;73(7):366-9. doi: 10.1136/jclinpath-2020-206658.
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- 7. Wu, Y., et al. A noncompeting pair of human neutralizing antibodies block COVID-19 virus binding to its receptor ACE2." Science 2020;368(6496): 1274-1278.
- 8. Cao, Y., et al. Potent Neutralizing Antibodies against SARS-CoV-2 Identified by High-Throughput Single-Cell Sequencing of Convalescent Patients' B Cells. Cell 2020;182(1): 73-84.e16
- 9. Rogers, T. F., et al. Isolation of potent SARS-CoV-2 neutralizing antibodies and protection from disease in a small animal model. Science. 2020; 10.1126/science.abc7520.
- 10. Chia, W. N., et al. Serological differentiation between COVID-19 and SARS infections. Emerg Microbes Infect. 2020;9(1): 1497-1505.

