

ACCEL ELISA[®]

COVID-19 **Total Antibody** Kit

Rapid ELISA For Detection of SARS-CoV-2 Antibody in Human Serum

Simple.
Fast.
Reliable.

**ONE WASH ELISA
IN 45 MINUTES OR LESS**

Universities / School Districts, Government
Facilities / Military Bases, Companies / Factory
Sites, Hospitals / Healthcare Sites,
Airports / Terminals / Borders, and more

Website: www.plexense.com

E-mail: info@plexense.com

Key Features & Benefits

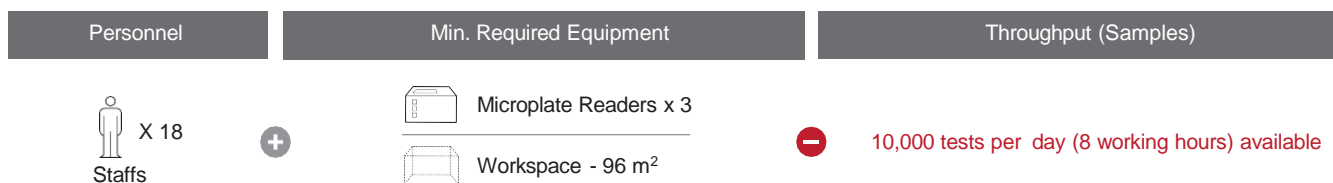
Fast and Simple High-throughput Assay

ACCEL ELISA® COVID-19 total Antibody test can be tested anywhere without Automation equipment which requires in the certified lab. The test could validate in 45 mins for 92 patients after samples are collected, by using only the basic portable laboratory equipment. It is all possible due to the simplified process of ACCEL ELISA® new technology.



Rapid and Scalable for Mass Testing

The ACCEL ELISA® testing system offers simple and easy scaling up of testing capacity to meet surging requirements.



No. of patient samples tested per day	No. of Medical Personnel Required	Minimum Equipment Required		
		Microplate Readers	Work Tables	Workspace
1,000	2	1 ea.	2 ea.	16 m ²
2,880	5	1 ea.	5 ea.	35 m ²
10,000	18	3 ea.	18 ea.	96 m ²

※ All other universal test equipment and accessories available in diagnostic lab or hospital may be used.

ACCEL ELISA® COVID-19 Total Antibody test offers a powerful solution for any organization looking to perform high-capacity routine mass testing using existing infrastructure and minimal resources.

Low Cost

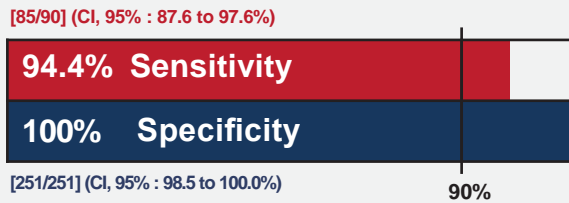
ACCEL ELISA® COVID-19 Total Antibody test also offers a cost-saving advantage over PCR test that requires expensive reagents.

Clinical Evaluation

Performance (Accuracy)

A total of 341 serum specimens from patients confirmed by RT-PCR were analyzed.

The ACCEL ELISA® COVID-19 total Antibody test kit showed 94.4% of Sensitivity and 100% of specificity, relative to the result of RT-PCR.



※ Test performance was conducted at the BioNano Health Guard Research Center, May 14~16, 2021.

Cross Reactivity and Interference

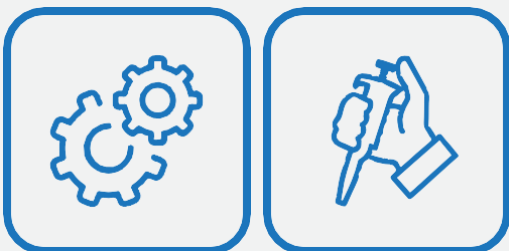
Cross reactivity with different types of human pathogenic coronaviruses and various organisms were analyzed. The result was only positive in the sample containing the SARS-CoV antibody.

The ACCEL ELISA® COVID-19 total Antibody test was evaluated for interference total of 40 specimens from 16 different categories were tested. None was found to interfere and affect test performance.

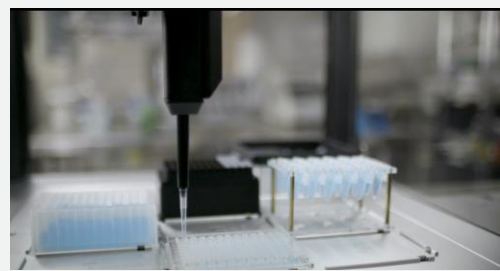
System Automation

Open-Platform Testing with Automation

ACCEL ELISA® COVID-19 total Antibody test has been designed as an open mode protocol and can be easily run on manual and almost all validated Semi-automated systems to significantly increase efficiency as per required.



Semi-automated
(Various Systems)


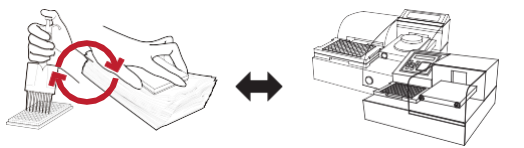
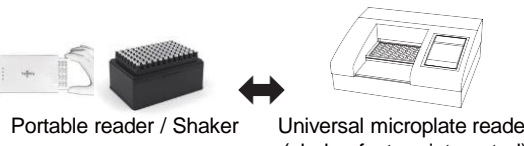



Opentrons Workstation
Liquid Handler

※Consult your distributor or the manufacturer for a list of pre-validated systems.

ACCEL ELISA® Workflow Automation

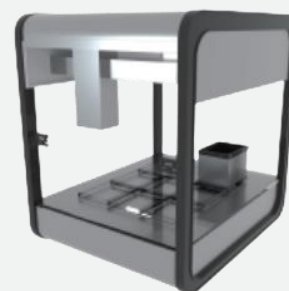
Manual and Semi-Automated Workflow

<p>① Sample Preparation</p>	 <p>Single channel pipetting ↔ Automated liquid handling</p>	<p>Samples & reagents are mixed using conventional pipetting technique or by automated liquid handling system</p>
<p>② Incubation & Washing</p>	 <p>Multichannel pipetting ↔ Automated washers</p>	<p>Upon completion of incubation step/s, microwells can be washed manually, or by using any pre-validated automated microplate washers</p>
<p>③ Reaction & Reading</p>	 <p>Portable reader / Shaker ↔ Universal microplate reader (shaker-feature integrated)</p>	<p>Users can select from many universal microplate readers or choose portable systems for mobile labs and on-site assay, eliminating the need for sample transport back to the lab.</p>
<p>④ Results Reporting</p>	 <p>Portable reader / Shaker</p>	<p>Results can be analyzed and reported using custom protocol. Easy exporting of data allows quick and effective data consolidation and management across multiple platforms</p>

Complete Sample Preparation (Semi-automation)

Simply load your reagents on the workstation, hit 'run,' and let the workstation prepare samples.

- Eliminates variations that occur with manual operations and technician variability.
- Has a small laboratory footprint simultaneously process 96 tests.
- Suitable for places where a shortage of technicians under high-stress demand situations.



Opentrons Workstation

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Specifications

ACCEL ELISA® COVID-19 Total Antibody test is a rapid ELISA for the qualitative detection of nucleocapsid protein (antibody) of SARS-CoV-2 present in serum sample.

Specimen	10~30 µL of serum
Testing time	45 mins
Packaging unit	96 Tests/Kit (92 samples)
Storage condition	2 ~ 8°C

※ Product package contains 1 well-plate and 7 reagents



Accessories needed in every system (per kit)

General Accessories

Item	Vacutainer / Needle	Test tube	Pipette tip	Single channel Pipette	Vortex	Micro Centrifuge
Unit/ Specification	92 units	96 ea	Dedicated tips for each system	Delivering single sample by µL scale	-	Micro Centrifuge for serum separation
Image						

Accessories required for manual and semi-automated platform

Item	Reservoir	paper towel
Unit/ Specification	Dedicated Reservoirs for each system	1 Pack
Image		

Item	Conventional 96 well plate for mixing samples	Multichannel pipette
Unit/ Specification	1 ea	Simultaneously delivering multiple samples by µL scale
Image		

※ System-specific accessories are available separately in addition to the above accessories.



Plexense Korea

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