COVID-19 diagnostics with dried capillary blood

- Convenient sample collection for the CE-marked EUROIMMUN ELISAs for detection of anti-SARS-CoV-2 antibodies (IgG)
- Smooth integration into existing processes and automation solutions
- For determination of the antibody status and collection of epidemiological data
Expand your customer range by offering dried blood spot analyses

The use of dried blood spots (DBS) as sample material reduces the blood collection to a quick prick into the fingertip, sparing patients the burdensome and stressful collection of venous blood. The blood spot is brought onto the blood collection card and after drying, it can be sent to the laboratory immediately. For instance, this allows companies to test all their employees in a fast and convenient way through their medical officer.

**Benefits for the senders**

- **Fast and easy blood collection**
  The blood collection card allows patients to easily collect their blood for the relevant in vitro diagnostic tests – either at home or with the help of healthcare professionals.

- **Easy shipment**
  The blood collection card with the DBS can be sent to your lab by post using the stamped return envelope. No cooling required.

**Benefits for your lab**

- **Automated processing**
  All work steps can be automated. Complete sample traceability is ensured at all times due to unique sample IDs.

- **All components from one manufacturer**
  EUROIMMUN offers all materials required for complete DBS diagnostics. In this way, matching work processes are provided together with complete service.
Automation solutions for every laboratory size

The blood collection cards and the EUROIMMUN ELISAs for detection of anti-SARS-CoV-2 antibodies are validated for fully automated processing on the EUROLabWorkstation ELISA. With every process step, the samples are clearly identified by barcodes. In this way, the laboratory information system (LIS) manages each patient sample from start to finish without any risks of mix-ups.

EUROLabWorkstation ELISA with 8 incubators
- Direct loading of the 96-well plates with extracts from DBS
- Parallel processing of up to 15 ELISA plates with 1390 samples
- Processing time: 5 h 37 min
- Sample throughput: 245 tests/hour

EUROIMMUN Analyzer I and Analyzer I-2P
- Loading of the extracts in sample tubes with unique ID
- Processing time: 3 h 10 min or 2 h 55 min
- Sample throughput: 57 or 49 tests/hour

Sprinter XL
- Processing time: 2 h 45 min
- Sample throughput: 87 tests/hour

green: EUROIMMUN product, blue: Please get in touch with your EUROIMMUN contact for information on the PerkinElmer products
Note: The processing times given apply to the Anti-SARS-CoV-2 NCP ELISA (IgG).
EUROIMMUN ELISAs for detection of anti-SARS-CoV-2 antibodies

S1 domain of the spike protein

- S1 domain of the spike protein contains the immunologically relevant receptor binding domain (RBD)
- RBD presents an important target antigen for virus-neutralising antibodies
- Antibodies against S1/RBD are considered the most promising indicator for possible immunity
- Excellent performance of the Anti-SARS-CoV-2 ELISA (IgG) and good correlation with neutralisation assays confirmed in external studies
- NEW! Also available for quantitative IgG determination in standardised units:
  Anti-SARS-CoV-2 QuantiVac ELISA (IgG)

Modified nucleocapsid protein

- Antigen with the strongest immune dominance in the coronavirus family
- Optimised specificity of the ELISA due to the use of a modified nucleocapsid protein (NCP) that only contains diagnostically relevant epitopes

In a nutshell

- Dried capillary blood (dried blood spots, DBS) is a convenient alternative to blood collection from veins.
- Detection of anti-SARS-CoV-2 antibodies (IgG) using the established EUROIMMUN ELISAs with DBS samples is CE-marked. Automated processing is validated for the EUROLabWorkstation ELISA.
- EUROIMMUN offers all required materials: blood collection cards, ELISA kits and comprehensive solutions for ELISA automation. Automation solutions for the punching and extraction of DBS are offered in cooperation with PerkinElmer.

Order information

<table>
<thead>
<tr>
<th>Category</th>
<th>Test system</th>
<th>Function</th>
<th>Order number</th>
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</thead>
<tbody>
<tr>
<td>DBS</td>
<td>EUROIMMUN Blood Collection Card (100 units)</td>
<td>Cards for blood collection for subsequent analysis in the laboratory</td>
<td>ZV 9711-01100</td>
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<tr>
<td>ELISA</td>
<td>Anti-SARS-CoV-2 ELISA (IgG)</td>
<td>Detection of IgG antibodies against the S1 domain of the SARS-CoV-2 spike protein</td>
<td>EI 2606-9601 G</td>
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<td>ELISA</td>
<td>Anti-SARS-CoV-2 QuantiVac ELISA (IgG)</td>
<td>Detection of specific IgG antibodies against the S1 antigen of SARS-CoV-2 by means of a 6-point calibration curve</td>
<td>EI 2606-9601-10 G</td>
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<td>ELISA</td>
<td>Anti-SARS-CoV-2 NCP ELISA (IgG)</td>
<td>Detection of IgG antibodies against the nucleocapsid protein of SARS-CoV-2</td>
<td>EI 2606-9601-2 G</td>
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<tr>
<td>Automation</td>
<td>PerkinElmer Panthera-Puncher 9</td>
<td>Automated punching of DBS in up to 9 96-well plates</td>
<td>2081-0010∗</td>
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<tr>
<td>Automation</td>
<td>PerkinElmer DBS Puncher 9</td>
<td>Automated punching of DBS in up to 2 96-well plates</td>
<td>1296-071∗</td>
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<td>Automation</td>
<td>EUROLabWorkstation ELISA</td>
<td>Automated punching of ELISA kits in high throughput</td>
<td>YG 0851-0101</td>
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<td>Automation</td>
<td>EUROMappingTool</td>
<td>Conversion of plate barcodes into sample tube barcodes</td>
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<td>Automated processing of ELISA kits</td>
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<td>Sprinter XL 160/240 ELISA</td>
<td>Automated processing of ELISA kits</td>
<td>YG 0033-0101-3</td>
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∗PerkinElmer product