Accula SARS-CoV-2 Test
technology overview

The Thermo Fisher Scientific™ Accula™ SARS-CoV-2 Test delivers gold-standard reverse transcription polymerase chain reaction (RT-PCR) detection of SARS-CoV-2 in a point-of-care format. RT-PCR testing is streamlined from start to finish using a fully integrated, single-use microfluidic test cassette and the reusable Accula™ Dock.

Workflow
Following collection, a swab sample is eluted into a buffer-containing collection tube that is provided with the Accula SARS-CoV-2 Test kit. The SARS-CoV-2 test cassette is placed into the Accula Dock, and the sample is loaded directly into the test cassette using the provided transfer pipette. The dock lid is closed to initiate (1) nucleic acid extraction, (2) reverse transcription, (3) PCR amplification, and (4) visual amplicon detection. Reduced sample handling provides an efficient workflow and helps reduce the potential for sample contamination by eliminating multiple manipulation steps.

Enabling technology
The Accula SARS-CoV-2 test is enabled by proprietary Oscar™ PCR technology. After the reverse transcription step, Oscar technology enables PCR at reduced absolute temperatures and reduced temperature differentials—resulting in rapid exponential amplification with shortened thermocycling times. Instead of relying on optical detection systems to report PCR results, the amplicon detection method of the Accula Test employs two sequence-specific hybridization probes to generate a colorimetric signal on the detection strip. Results are interpreted visually by the operator after the test is completed (approximately 30 minutes). All steps of sample testing are fully integrated for decentralized use at the point of care.

Find out more at thermofisher.com/mesa