

COVID-19 DETECTION TOTAL SOLUTION FROM SARS-COV-2

The rapidly spreading covid-19 has put the test of new coronavirus the center of how affected patients are diagnosed so they can get treatment quickly.

The WHO published on January 17th the Interim Guidance for Laboratory Testing for New Coronavirus (2019-nCoV) in suspected human cases, recommending four testing protocols: RT-PCR, other nucleic acid detection protocols under development, whole-genome sequencing and serological testing of paired samples.

With its brother company Citotest and Maccura, DLAB can provide all required consumables, reagents and equipment. We would like to work together with our customers, hospital and testing labs, to STOP the virus and bring back the health!

RT-PCR testing solution

Taking reference of WHO recommended testing method and PUMCH recommended operation protocols, here we introduce a full workflow from specimen collection to Nucleic Acid Testing for people who may need to take reference. <https://youtu.be/Nd69PrIP5IY>

1. TEST SPECIMEN COLLECTION—CITOTEST VIRUS COLLECTION AND TRANSPORT KITS

Collect specimen with swab to a sterile, leak-proof, screw-cap sputum collection tube.



2. SPECIMEN INACTIVATION

Inactivate the specimen at 56 centigrade Celsius on dry bath.



HB105-S2



HB120-S



H100-Pro

Incubation in applicable temperature range. Various types of optional blocks are available

3. RNA EXTRACTION & PURIFICATION

A. USE ELECTRONIC PIPETTE FILLER TO PREPARE WORKING REAGENTS

**Levo Plus**

large volume liquid transfer up to 100ml

Powerful pump fills a 25ml pipette in < 5s

B. CHOOSE AN APPROPRIATE MICROPIPETETTE FOR NUCLEIC ACID EXTRACTION

**dPette Electronic Micropipette**

Accurate & precise motor control
Easy blowing and complete mixing

**MicroPette Plus single / 8 / 12 channel**

Autoclavable as one piece
Improve efficiency for higher throughput

C. VORTEX MIXER MX-S AND PALM CENTRIFUGE D1008

**MX-S Vortex Mixer**

Robust design
Intense vortex mixing

**Palm Centrifuge D1008**

Short spin to remove bubbles
Up to 32 PCR tubes or 4 x 8-well strip

D: HCM100-PRO THERMO MIX MIXING REAGENTS

For kits based on magnetic beads for testing, incubate the samples with HCM100-Pro Thermo Mix.



HCM100-Pro

- Heating & Cooling & Mixing
- Customizable multi-step programs
- Temperature calibration function
- Quick interchange of blocks

E. D2012 PLUS/ D1524R HIGH SPEED CENTRIFUGE

For column filtration based kits, Washing & spinning the column with high speed centrifuge



D2012 plus High Speed Mini Centrifuge

Max. speed:15000rpm Available use inside the biosafety cabinet.
Short-time run function



D1524R High Speed Refrigerated Centrifuge

Powerful cooling to keep the sample at 4°C
RCF up to 21000g.
Inching operation.

4. RT-QPCR

A: SARS-COV-2 NUCLEIC ACID DETECTION KIT (FLUORESCENT PCR)



- Triple detection to prevent missed detection
- Add internal standard and monitor the whole process :
- Simulate viruses to ensure quality
- Optimized processes, efficient and safe

B: REAL-TIME PCR SYSTEM: ACCURATE 96-X4/X6



Accurate 96-x4/x6

- 4/6 channel high speed fluorescence scanning without crosstalk
- Accurate, uniform and rapid temperature control
- High detection sensitivity /resolution/ accuracy
- Wide dynamic range: 10 orders of magnitude copies

Serological testing

SARS-COV-2 IGM/IGG ANTIBODY ASSAY KIT BY COLLOIDAL GOLD METHOD



- Normally 15 mins, fastest 150s to get result
- Detect IgM and IgG, improving detection rate
- Supporting serum, and plasma sample types
- Optimizing N and S protein fragments, effectively improving the detection rate

RECOMMENDED MINIMUM PACKAGE

We recommend the following minimum package for nCoV-19 detection.

- (1) Levo Plus Pipette Filler x 1;
- (2) MX-S Vortex Mixer x 3;
- (3) D1008 Palm Centrifuge x 2;
- (4) MicroPette Plus Single Channel 20 μ l, 200 μ l, 1000 μ l x 4 set; (2 set backup for autoclave)
- (5) MicroPette Plus Single Channel 20 μ l, 8 Channel 10 μ l x 2 set; (1 set backup for autoclave)
- (6) D2012 Plus/D1524R High Speed Centrifuge x 1;
- (7) HB105-S2/ HB120-S/H100-Pro x 1
- (8) HCM100-Pro x 1
- (9) Accurate 96-x4/x6 x 1.
- (10) Citotest virus collection and transport kits x 1
- (11) Maccura SARS-CoV-2 Nucleic Acid Detection Kit(Fluorescent PCR) x 1
- (12) Maccura SARS-CoV-2 IgM/IgG Antibody Assay Kit x 1.