An Innovative Diagnostics Test Designed by Xiamen University & WANTAI

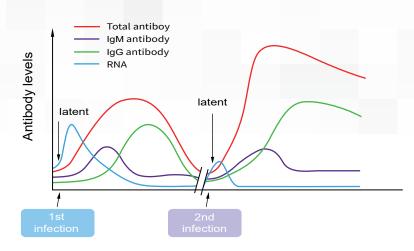


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# Total Ab ELISA for SARS-CoV-2 Virus (COVID-19)

For more information: wtexport@ystwt.com

## Serological and virolocal markers of COVID-19



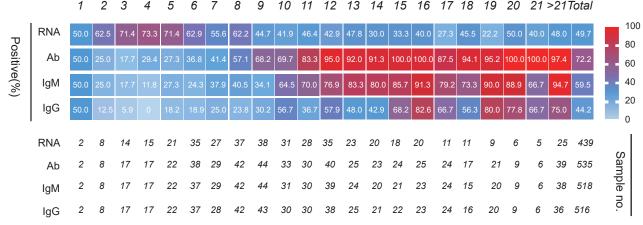
WANTAI

Wantai SARS-CoV-2 Ab ELISA is highly sensitive and specific diagnostic kit intended for high-throughput, fast antibody screening for patients suspected for **COVID-19** infection.

Antibody dynamics during COVID-19 infection

## **Clinical importance of combined RNA and antibody testing**

Days since onset



Reference via: https://www.medrxiv.org/content/10.1101/2020.03.02.20030189v1

#### COVID-19 serological markers dynamics (Total Ab/ IgM/ IgG):

20%-40% of the patients developed antibodies on days 0-7 after onset
60%~70% of the patients developed antibodies on days 8-11 after onset
> 90% of the patients had detectable levels of antibodies starting from day 12 after onset.

#### I COVID-19 molecular markers dynamics (RNA):

RNA was detected in **60-75%** of the patients on days 0-8 after onset RNA levels decrease to **40-50% starting from day 9** after onset

**COVID-19** combined serological and molecular markers increases the sensitivity of diagnosis while maintaining the high specificity. **Among the serological markers, total Ab** detection has greater significance in clinical practice.



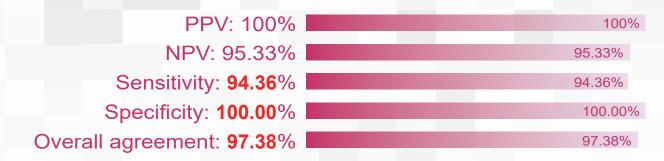
## **Clinical studies in China**

Prospective clinical evaluation was conducted at four hospitals in China during the 2020 COVID-19 outbreak. Samples from total of 572 cases were tested among which 266 were confirmed (China COVID-19 diagnosis protocol, including China CFDA approved PCR tests), and 306 were COVID-19 excluded cases.

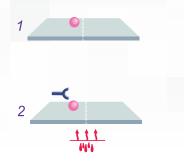
| Clinical trial centers               | Confirmed | Excluded | Total |
|--------------------------------------|-----------|----------|-------|
| Academy of Military Medical Sciences | 12        | 0        | 12    |
| Shenzhen Third People's Hospital     | 173       | 33       | 206   |
| Zhejiang University                  | 81        | 273      | 354   |
| Total                                | 266       | 306      | 572   |

## Sensitivity and specificity of Wantai SARS-CoV-Ab ELISA

| Evaluation results |          | Confirmed/ excluded SARS-CoV-2 results |          |       |
|--------------------|----------|--|----------|-------|
|                    |          | Confirmed                              | Excluded | Total |
| Wantai             | Positive | 251                                    | 0        | 251   |
| Walita             | Negative | 15                                     | 306      | 321   |
| Total              |          | 266                                    | 306      | 572   |



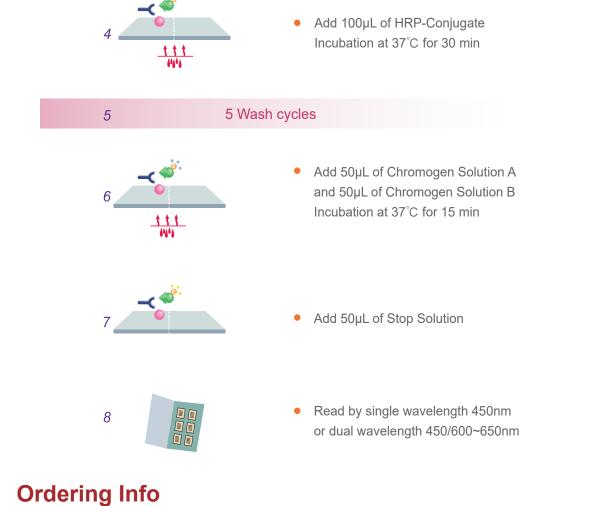
## **Principle and Procedures**



- Microwell strips pre-coated with recombinant SARS-CoV-2 antigens
- Add 50µL Controls or 100µL of Specimens Incubation at 37°C for 30 min
- SARS-Cov-2 antibody
- SARS-Cov-2 antigen
- HRP-conjuagted SARS-Cov-2 antigen



5 Wash cycles



| Cat  | t.  | Product             | Detection         | Specimen     | Pack size | Time to result |
|------|-----|---------------------|-------------------|--------------|-----------|----------------|
| WS-1 | 096 | SARS-CoV-2 Ab ELISA | Total Ab(IgM+IgG) | Serum/Plasma | 96T/kit   | 75 min         |

### Beijing WANTAI Biological Pharmacy Enterprise Co., Ltd.