Lateral flow immunoassay for the detection of **IgG and IgM** antibodies of **SARS-CoV-2 Virus (COVID-19)**

COVID-19 Rapid Test

NOVA Test®

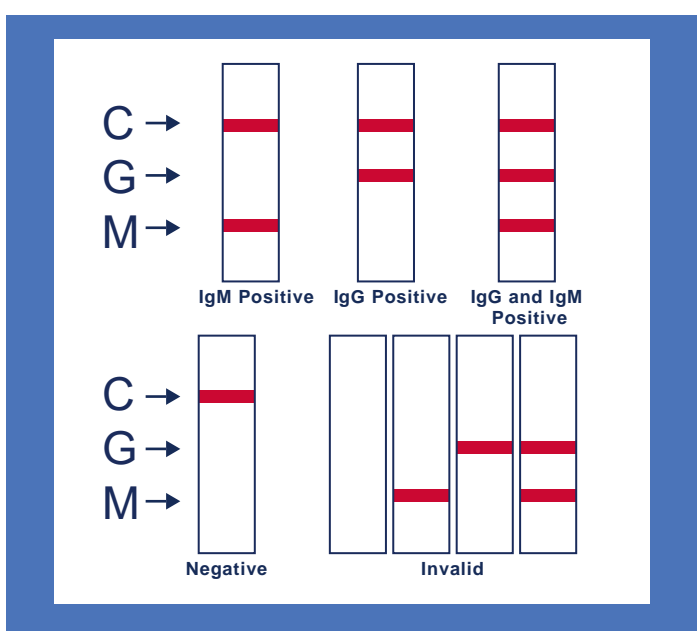COVID-19 IgG/IgM antibody Rapid test

Advantages of antibody testing:

Higher Efficiency: The fast, large-scale batch operation makes a shorterdetection time than nucleic acid detection, which is a effective method for large-scale preliminary screening;

Lower cost: Compared with CT scan detection and nucleic acid detection, this production has obvious price advantages;

Lowest risk of infection:
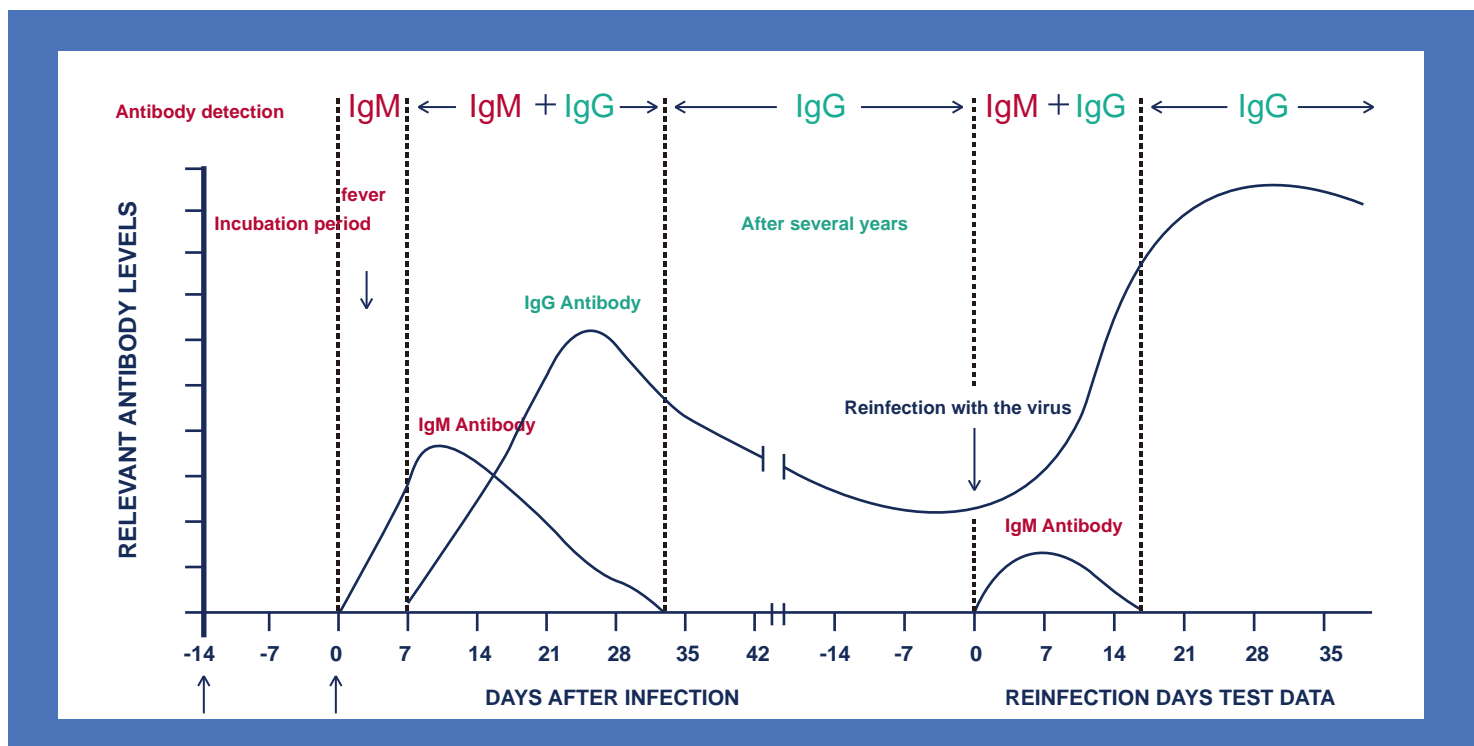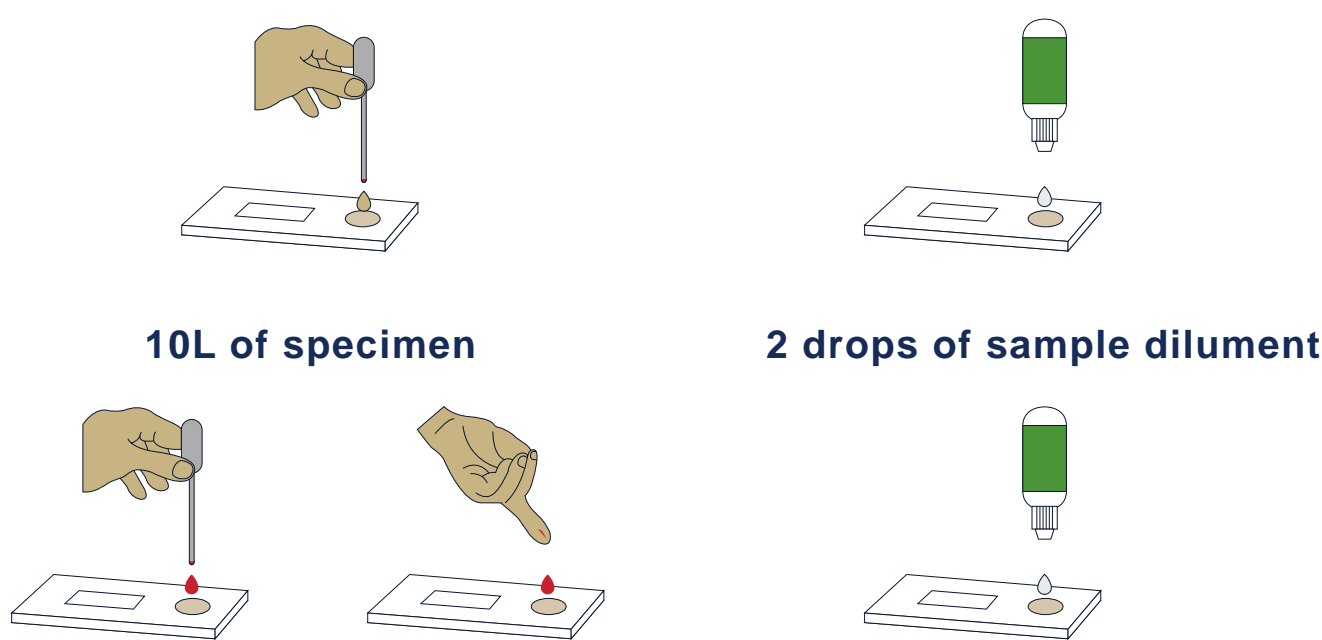Reduce the risk of exposure during the collection of the respiratory samples;

Double tests significantly increase the diagnosis rate:
The combined nucleic acid detection may help to further increase the detection rate of new coronavirus infections.

C →
G →
M →

IgM Positive   IgG Positive   IgG and IgM Positive

C →
G →
M →

Negative   Invalid

Advantages of combined **IgG and IgM** detection:

IgM antibody positive can be used as a diagnostic indicator of acute infection; IgG appears later than IgM. A significant increase indicates a recent infection, and a significant decrease indicates that it is in the late stage of infection; Simultaneous determination of IgG and IgM can improve the diagnosis rate.

Test description step by step

10L of specimen

2 drops of sample dilument

Antibody detection   IgM ← IgM + IgG → ← IgG → IgM + IgG ← IgG →

RELEVANT ANTIBODY LEVELS

Incubation period   fever

After several years

IgG Antibody

IgM Antibody

Reinfection with the virus

IgM Antibody

-14 -7 0 7 14 21 28 35 42   -14 -7 0 7 14 21 28 35

DAYS AFTER INFECTION   REINFECTION DAYS TEST DATA

Test Data

Comparing 300 samples with similar methodological detection kits, the diagnostic sensitivity of IgM test is 96.3% -97.7%; the diagnostic specificity is 97.6%; the total compliance is 97.0-97.7%. The diagnostic sensitivity of IgG test is 95.8%; diagnostic specificity is 96.2% -96.8%; total compliance is 96.0% -96.3%