

Product datasheet

Coronavirus IgM/IgG Antibody Detection Card
ab288112

3 Images

Overview

Product name	Coronavirus IgM/IgG Antibody Detection Card
Detection method	Colorimetric
Sample type	Serum, Plasma, Whole Blood
Assay type	Sandwich (qualitative)
Assay time	0h 15m
Assay duration	One step assay
Species reactivity	Reacts with: Human
Product overview	This Coronavirus IgM/IgG Antibody Detection Card ab288112 (previously known as Coronavirus IgM/IgG Antibody Detection Card K1463) can be used to detect IgG and IgM antibodies against the novel coronavirus SARS-CoV-2 in human blood-derived samples.

The antibodies IgG and IgM are the most commonly used markers of infectious diseases. IgM is produced first during infection and is usually used as a marker of acute infection. IgM gradually decreases and disappears after the appearance of IgG. IgG usually exists in the body for a longer time, even after the virus has been completely eliminated. A positive result for anti-Coronavirus IgM or IgG can be used as an indicator of a current or previous infection of Coronavirus.

The Coronavirus Detection Card uses colloidal gold immune-technology to detect novel Coronavirus IgM and IgG antibodies. The Test Card contains a nitrocellulose membrane and a combination card. The detection area of the nitrocellulose membrane is coated with mouse anti-human IgM antibodies at the M test line and mouse anti-human IgG antibodies at the G test line, while the control area is coated with rabbit anti-chicken IgY antibodies at the C line. The combination card is sprayed with colloidal gold-labeled recombinant novel Coronavirus nucleoprotein (N)/spike glycoprotein (S) antigens and colloidal gold-labeled chicken IgY, and is comprised of a sample pad, absorbent pad and a PVC soleplate.

When the test sample is added to the sample hole of the Test Card, the sample will move along the detection card by chromatography. If the sample contains novel Coronavirus nucleoprotein (N)/spike glycoprotein (S) IgM or IgG antibodies, the antibodies will bind to the gold-labeled novel Coronavirus nucleoprotein (N)/spike glycoprotein (S) antigens sprayed on the combination card. When the sample reaches the detection area, the IgM and IgG antibodies are bound by the mouse anti-human IgM and IgG antibodies at the M and G test lines. This two-step binding forms

an immune sandwich complex at the test lines, which appears a purplish red color. A visible purple line at the M or G line indicates the presence of novel Coronavirus nucleoprotein (N)/spike glycoprotein (S) IgM or IgG antibodies respectively in the sample.

If there are not novel Coronavirus nucleoprotein (N)/spike glycoprotein (S) IgM or IgG antibodies in the sample, then no immune complex can form. The colloidal gold-labeled antigens spread out over the test card instead, and no purple line forms at the M or G test lines. The absence of a visible purple line at the M or G line indicates the absence of novel Coronavirus nucleoprotein (N)/spike glycoprotein (S) IgM or IgG antibodies respectively in the sample.

The C line is coated with rabbit anti-chicken IgY antibodies. The colloidal gold-labeled chicken IgY antibodies sprayed on the combination card move up the detection card with the sample liquid, and are bound by the coated rabbit antibodies. This immune complex appears as a visible purplish red color line, as a quality control indicator.

Tested applications

Suitable for: LFA

Platform

Flow

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	25 tests
Sample Diluent	25 x 450µl
Test card	25 units

Applications

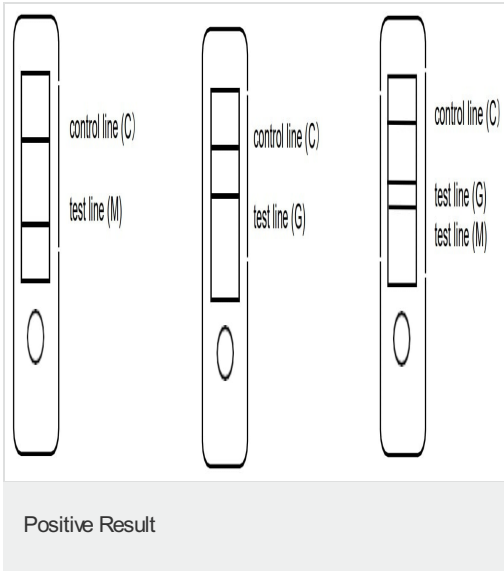
The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab288112 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
LFA		Use at an assay dependent concentration.

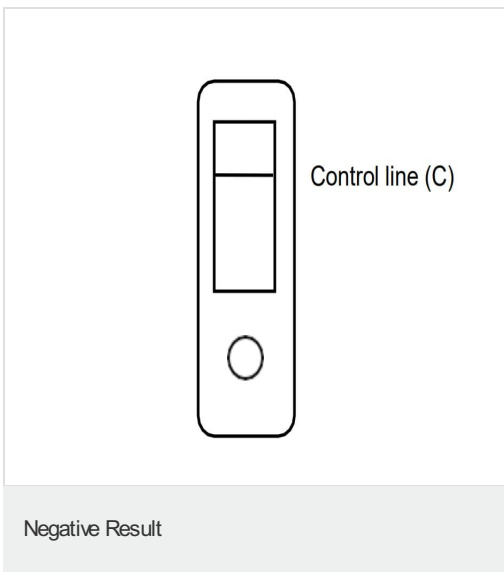
Images



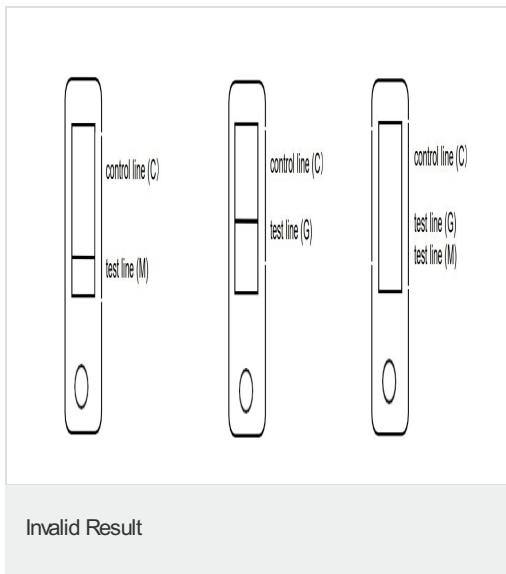
Left: If both the test line (M) and the control line (C) show purple-colored bands, then the result is positive indicating the presence of IgM antibodies of novel Coronavirus nucleoprotein (N)/spike glycoprotein (S).

Middle: If both the test line (G) and the control line (C) show purple-colored bands, then the result is positive, indicating the presence of IgG antibodies of novel Coronavirus nucleoprotein (N)/spike glycoprotein (S).

Right: If all of the test lines, (M), (G), and control line (C) show purple-colored bands, then the result is positive indicating the presence of the novel Coronavirus nucleoprotein (N)/spike glycoproteins (S) IgM and IgG antibodies.



If only the control line C shows color, but the G and M test lines do not show color, then the result is negative and shows absence of IgM/IgG antibodies of novel Coronavirus nucleoprotein (N)/spike glycoprotein (S).



Invalid result is confirmed if the color does not develop at the control line, even if the test lines (G and M) show color.

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