

Comparative Test Report

SARS-CoV-2 IgM Ab Rapid Test
(Immunochromatographic)

Version 4.0

1. Method

In this trial, 1300 clinical samples were selected. There were 300 positive samples and 1000 negative samples.

The SARS-CoV-2 IgM Ab rapid test and the SARS-CoV-2 PCR test were detected simultaneously, and the positive coincidence rate, negative coincidence rate, and total coincidence rate were calculated.

2. Result

(1) 300 cases of positive samples confirmed by Nucleic Acid Test: tested with SARS-CoV-2 IgM Ab rapid test, 246 cases were positive, 54 cases were negative.

(2) 1000 cases of negative samples confirmed by Nucleic Acid Test: tested with SARS-CoV-2 IgM Ab rapid test, 960 cases were negative, 40 cases were positive.

3. Analysis

(1) Results statistics table

SARS-CoV-2 IgM Ab Rapid Test	PCR Test		Total
	Positive	Negative	
Positive	246	40	286
Negative	54	960	1014
Total	300	1000	1300

(2) Analysis of coincidence rate of SARS-CoV-2 IgM Ab rapid test and PCR test in serum samples

$$\text{Positive coincidence rate} = 246 / (246 + 54) \times 100\% = 82\%$$

$$\text{Negative coincidence rate} = 960 / (40 + 960) \times 100\% = 96\%$$

$$\text{Total coincidence rate} = (246 + 960) / (246 + 54 + 40 + 960) \times 100\% = 92.8\%$$

4. Conclusion

SARS-CoV-2 IgM Ab rapid test and PCR test positive coincidence rate of 82%, negative coincidence rate of 96%, total coincidence rate of 92.8%.

Comparative Test Report

SARS-CoV-2 IgG Ab Rapid Test
(Immunochromatographic)

Version 3.0

1. Method

In this trial, 1300 clinical samples were selected. There were 300 positive samples and 1000 negative samples.

The SARS-CoV-2 IgG Ab rapid test and the SARS-CoV-2 PCR were detected simultaneously, and the positive coincidence rate, negative coincidence rate, and total coincidence rate were calculated.

2. Result

(1) 300 cases of positive samples confirmed by PCR Test: tested with SARS-CoV-2 IgG Ab rapid test, 279 cases were positive, 21 cases were negative.

(2) 1000 cases of negative samples confirmed by PCR Test: tested with SARS-CoV-2 IgG Ab rapid test, 975 cases were negative, 25 cases were positive.

3. Analysis

(1) Results statistics table

SARS-CoV-2 IgG Ab Rapid Test	PCR Test		Total
	Positive	Negative	
Positive	279	25	304
Negative	21	975	996
Total	300	1000	1300

(2) Analysis of coincidence rate of SARS-CoV-2 IgG Ab rapid test and PCR test in serum samples

$$\text{Positive coincidence rate} = 279 / (279 + 21) \times 100\% = 93\%$$

$$\text{Negative coincidence rate} = 975 / (25 + 975) \times 100\% = 97.5\%$$

$$\text{Total coincidence rate} = (279 + 975) / (279 + 21 + 25 + 975) \times 100\% = 96.5\%$$

4. Conclusion

SARS-CoV-2 IgG Ab rapid test and PCR test positive coincidence rate of 93%, negative coincidence rate of 97.5%, total coincidence rate of 96.5%.