Reaction System study

Sample processing time

Test enterprise reference product with Novel Coronavirus (2019-nCoV) Antigen Test Kit (Colloidal Gold). Choice 4 weakly positive samples, 2 Nasal swabs and 2 Throat swabs, record the test results after 0.5min, 1.0min 2.0min and 3.0min of the swab put into the Specimen extraction buffer. The test results are as follow:

 Table 1: Test results of enterprise reference product under different specimen

 extraction time

Reaction time	0.5min	1.0min	2.0 min	2 0
Specimen			2.0min	3.0min
P1- Nasal	Negative	Positive	Positive	Positive
P2- Nasal	Positive	Positive	Positive	Positive
P3- Throat	Negative	Positive	Positive	Positive
P4- Throat	Negative	Negative	Positive	Positive

According to test results from Table 1, when conduct the test with Novel Coronavirus (COVID-19) Antigen Test Kit (Colloidal Gold), test after 2.0 minutes sample processing will give the corrected results. That's the antigen which may contained in the sample will be extracted out in 2 minutes.

Reaction time

Test enterprise reference product with Novel Coronavirus (2019-nCoV) Antigen Test Kit (Colloidal Gold). record the test results in 5min, 10min 15min and 20min after adding specimen. The test results are as follow:

Table 2: Test results of enterprise reference product under different reaction time

Reaction time	5min	10min	15min	20
Specimen			15min	20min
G01	Negative	Negative	Positive	Positive
G03	Positive	Positive	Positive	Positive
G 10	Positive	Positive	Positive	Positive
L01	Negative	Negative	Negative	Negative

According to test results from Table 14, when conduct the test with Novel Coronavirus (COVID-19) Antigen Test Kit (Colloidal Gold), test result read in 15-20min after adding specimen is valid, less 15min or more than 20min have an impact on test results.