



Feb 05, 2021

To whom it may concern,

We, Anbio(Xiamen) Biotechnology Co.,Ltd recently has launched our new version COVID19 Antigen test by nasal swab, throat swab, saliva 3 specimens which could greatly improve the specificity of the test by saliva specimen.

In addition, we hereby declare that our COVID19 Antigen test is effective to mutant strain in British and South Africa. Please see below details.

1. The British and South Africa mutant, commonly known as the B.1.1.7 subtype, has been named VOC-202012/01 novel coronavirus. The most important mutations in this strain relative to the common strain are three mutations in the RBD region K417N, E484K, and N501Y. These three mutations make it easier for the virus to bind to the ACE2 receptor in the human body, making it easier for the virus to spread.

2. Why our product is still effective: a. What we detected is mainly the N protein of novel coronavirus, which is relatively conservative, and this British & South Africa mutant strain is mainly the gene encoding RBD protein; b. The mutant region of the British & South Africa mutant strain is not within our detection range, so our detection reagent was still effective in detecting the antigen of the mutant strain, but it also means that our reagent could not distinguish the mutant strain from the common strain;

3. Simulated data:

3.1. Detection of recombinant full-length RBD protein of mutant strains:

Detection of recombinant full-length RBD protein of mutant strains of
K417N,E484K,N501Y Mutated RBD Protein

mutated recombinant protein	common strain	Sensitivity of national reference
800pg/mL:G4	800pg/mL:G4	S1:G4 (6800TCID50)
400pg/mL:G3	400pg/mL:G3	S2:G4 (3400TCID50)
200pg/mL:G2	200pg/mL:G2	S3:G3 (1700TCID50)
100pg/mL:G1	100pg/mL:G1	S4:G2 (850TCID50)
50pg/mL:G0	50pg/mL:G0	S5:G0 (425TCID50)

Note: color darker than G0 can be judged positive

3.2. Detection of animal model samples: detection of S protein in Clara cells of respiratory tract infected in mouse model:

concentration (pg/mL)	1600	800	400	200	100	50
results	G5	G4	G3	G2	G0	G0

Your sincerely

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