

Joysbio develops kit for verifying antibodies after vaccination

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JOYSBIO's COVID-19 neutralizing antibody test kit is a lateral flow assay for rapid NAb screening

In a major breakthrough for testing COVID-19 immunity, JOYSBIO, a Chinese medical device manufacturer, has announced the completion of a clinical study in Italy, showing their COVID-19 neutralizing antibody (NAb) rapid test kit is 98.05% effective in detecting neutralizing antibodies in subjects given the Pfizer-BioNTech vaccine.

Because the kit is inexpensive and delivers results in 25-30 minutes, it's could be used for analyzing immunity status in subjects, allowing officials and others to make decisions about distancing, mask wearing, and other precautions.

As the world moves past the COVID-19 pandemic using multiple vaccines, the presence of neutralizing antibodies after vaccination becomes a topic. The JOYSBIO test detects neutralizing antibodies, antibodies that bind to a specific part of the pathogen. These antibodies have been observed, in laboratory settings, to decrease SARS-CoV-2 viral infection of cells. Their presence indicates that the subject has certain level of immunity against SARS-COV-2 infection.

JOYSBIO's COVID-19 neutralizing antibody test kit is a lateral flow assay for rapid NAb screening, which can mimic the virus neutralization process. This lateral flow assay contains two key components: the recombinant SARS-CoV-2 receptor binding domain (RBD) labeled by colloidal gold, and the human angiotensin-converting enzyme 2 (hACE2) coated with cellulose nitrate membrane. The protein-protein interaction between RBD and hACE2 can be blocked if the test samples contain a certain level of neutralizing antibody against SARS-CoV-2.