

COVID-19 Detection by Using Magiprobe

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Abstract

COVID-19 is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. As of today, there are about 2.5 million confirmed COVID cases. But numerous reports have stated that anywhere between 25-50% of cases are asymptomatic. Asymptomatic cases can be attributed to the rapid spread of COVID because they can also infect other healthy people. At this time, there are no specific vaccines or treatments for COVID-19. As a result, the diagnostic tests of COVID-19 is very important to people. There are already a few kinds of different tests. My research found another one kind of test by using the Magiprobe. I use NCBI dataset found segments of sequences from the open area of the RNA which forms SARS-CoV-2. Then, translate them into their complementary sequence. After that, by using Linux, I tested the kcal value of different probes, both against human and against the virus. Lower the value is, more correct the test probe is. After comparing all of them, I find the lowest value of the probes and that's the best test probe in this group. This test can be really fast and cheap to do. More research is also needed to be down in order to find the best part.