Early detection of COVID-19 with Third Generation Assay

"The production of IgM, IgA and IgG antibodies against SARS-CoV-2 were positive as early as Day 1 after the symptom onset."

"Overall, the seroconversion of Ab was significantly quicker than that of IgM (p = 0.012) and IgG (p < 0.001), that possibly attributed to the double-antigen sandwich form of the assay used which usually show much higher sensitivity than capture assay (IgM) and indirect assay (IgG). Moreover, all isotypes of antibodies against viral antigen, including IgM, IgA and IgG, can be detected by double-sandwich based assay, which may also contribute to the superior performance of Ab test."

"It is likely that SARS-CoV-2 behaves as other respiratory viruses yielding the production of protective secretory IgA efficient in asymptomatic or mild infections."
M. C. Bene, et. al., "Good IgA bad IgG in SARS-CoV-2 infection?" Clinical Infectious Diseases, 11 April 2020.

Coviscreen™
Double Antigen Assay for IgM + IgG + IgA Detection
Early Detection • High Sensitivity • High Specificity
Coronavirus, initially named as the 2019-novel coronavirus (SARS-CoV-2) on January 2020 by World Health Organization (WHO). WHO officially named the disease as coronavirus disease 2019 i.e. COVID-19. Transmission occurs primarily via respiratory droplets from coughs and sneezes within a range of about 1.8 metres (6 ft). Indirect contact via contaminated surfaces is another cause of infection.

In densely populated demography, social isolation of the people is the only way to break the infection chain of COVID-19 infection. So, mass level testing plays a critical role to identify infected and possible infected people and isolate them to break the transmission chain of this contagious disease to stop this pandemic.

During the COVID-19 infection, various studies have shown that IgM and IgG class of antibodies can be detected almost simultaneously in the early phase of infection. There seems to be a very strong evidence that the measurement of IgA levels in patients would be of great value in the diagnosis of the SARS-CoV-2 infection. Therefore detection of total antibodies (IgA+IgM+IgG) ensures sensitive detection of the infection that is important for epidemiological screening.

Coviscreen™ is rapid double antigen screening test for detection of Total antibodies (IgA+IgM+IgG) to COVID-19 in human serum/plasma and whole blood.