

THSTI develops human monoclonal Ab against SARS-CoV2

07 July 2020 | News | By Manbeena Chawla

The team hopes this 'in-house' mAb facilitates COVID-19 research activities across the country.



A team of scientists from Faridabad based Translational Health Science and Technology Institute (THSTI) Infection and Immunity Program, led by Dr. Rajesh Kumar, developed the human monoclonal antibody (mAb) against the receptor-binding domain (RBD) of SARS-CoV2.

The mAb has been shown to bind to the receptor-binding domain (RBD) protein of SARS-CoV2 with high affinity and specificity.

The RBD of the spike protein of SARS-CoV2 is the primary target for neutralizing antibodies to block infection.

The team hopes this 'in-house' mAb facilitates COVID-19 research activities across the country. The team has developed different formats of this mAb - scFv, scFv-Fc, and IgG1 against COVID-19.

This well-established platform allows isolating neutralizing antibodies against COVID-19, which might be helpful to use as an alternate therapeutic.

Furthermore, the availability of an extensive array of SARS-CoV2 specific monoclonal antibodies can help to design vaccines through structural vaccinology. This part of the research work has been submitted to a peer-reviewed journal for consideration. The research is funded by the Department of Biotechnology (DBT).