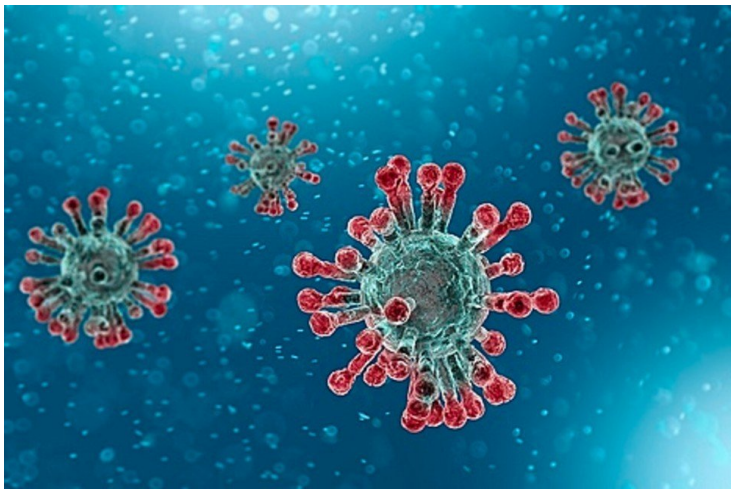
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Australia discovers receptor that blocks COVID-19 infection

February 14, 2023 | News

The receptor sticks to the virus and pulls it away from the target cells



Australia's University of Sydney scientists have discovered a protein in the lung that blocks SARS-CoV-2 infection and forms a natural protective barrier in the human body.

This protein, the leucine-rich repeat-containing protein 15 (LRRC15), is an inbuilt receptor that binds the SARS-CoV-2 virus without passing on the infection.

The research opens up an entirely new area of immunology research around LRRC15 and offers a promising pathway to develop new drugs to prevent viral infection from coronaviruses like COVID-19 or deal with fibrosis in the lungs.

The researchers also said that the presence or lack of LRRC15, which is involved in lung repair, is an important indication of how severe a COVID-19 infection might become.

“A group at Imperial College London independently found that absence of LRRC15 in the blood is associated with more severe COVID, which supports what we think is happening. If you have less of this protein, you likely have serious COVID. If you have more of it, your COVID is less severe. We are now trying to understand exactly why this is the case”, said the researchers.