

Australia evaluates heat-tolerant COVID-19 vaccine formulations

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CSIRO study shows new 'warm vaccine' effective against all key virus variants



Commonwealth Scientific and Industrial Research Organisation (CSIRO), based in Australia, played an important role in evaluating heat-tolerant COVID-19 vaccine formulations developed by the Indian Institute of Science (IISc) incubated biotech startup Mynvax – against all current SARS-CoV-2 variants of concern.

The researchers showed the vaccine formulations triggered a strong immune response in mice, protected hamsters from the virus, and remained stable at 37°C up to a month and at 100°C for up to 90 minutes.

Most vaccines require refrigeration to remain effective, like Oxford-AstraZeneca which must be kept between 2-8°C and Pfizer which requires specialised cold storage at -70°C.

CSIRO scientists at the Australian Centre for Disease Preparedness in Geelong contributed to the study by assessing vaccinated mice sera (blood samples) for efficacy against key coronavirus variants, including the Delta variant currently spreading globally including in Sydney.

Dr. S.S. Vasan, CSIRO's COVID-19 project leader and co-author, said the Mynvax-vaccinated mice sera show a strong response to all variants of the live virus.

CSIRO's evaluation of the different Mynvax formulations will support selection of the most suitable candidate for planned human clinical trials in India later this year.