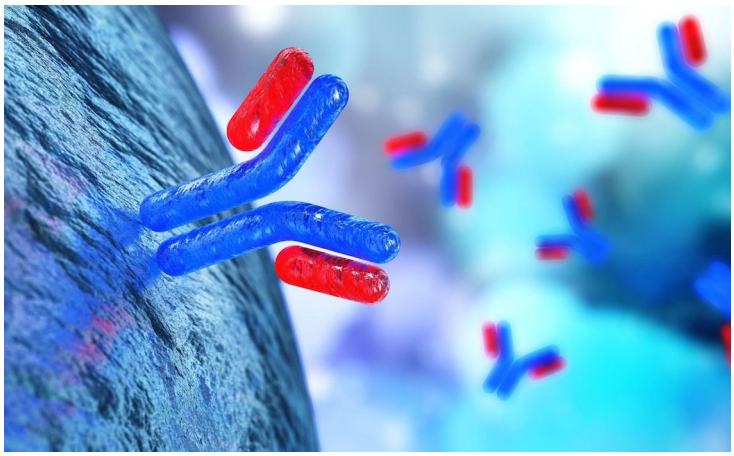
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# Japan identifies molecules for building stronger antibodies

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**TFH cells are essential for producing high-affinity antibodies and for generating long-lived antibody-producing cells**



A team of researchers at the Institute for the Advanced Study of Human Biology (*ASHBi*) at Kyoto University, Japan provides important insights for the development of vaccines that induce potent and durable antibody responses.

One of the most effective ways by which the body fights off an infection is by producing antibodies. Antibodies are not easy to make in the lab, but vaccines stimulate antibody production in the body for a specific infection, such as SARS-CoV-2, the virus responsible for the COVID-19 pandemic.

A number of immune cells are involved in the antibody production, including TFH cells, or T follicular helper cells.

This new study by ASHBi reports how the transcription factor Tox2 controls the activation of one of these cells, TFH cells.

“Our study shows that Tox2 is important for the long-term survival and functional maintenance of TFH cells. This suggests a role distinct from other T cells,” said the researchers. The experiments suggest that targeting Tox2 could be used therapeutically to modulate TFH cells.