HIV Can Disguise Itself as Bacteria and Evade Antibodies

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HIV appears to evade attacks from the immune system in part because antibodies mistake the virus for bacteria, Healthline News reports. Publishing their findings in Cell Host & Microbe, researchers examined B-cell antibodies' reaction to the virus and to bacteria that thrive in the gut.

B cells are a key part of the immune response because of their ability to recognize a specific infection once it has been introduced in the body.

The researchers found that the dominant B-cell immune response was to the gp41 region of HIV's outer envelope. As it happens, gp41 closely resembles various bacteria. Eighty-two percent of the antibodies programmed to recognize gp41 cross-reacted with bacteria. The researchers determined that these cross-reactive antibodies originated in the intestine and that the immune response to gp41 can derive from a pool of B cells that were programmed by bacteria before the body was infected with HIV.

To read the Healthline story, click here.

To read the study, click here.

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http://beta.docker.poz.com/article/bacteria-disguise-26043-6724