



Early HIV Vaccine Studies in Animal Models Show Promise

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Scientists have made progress in prompting powerful antibodies against HIV in animal-based research, raising hope for the future of human vaccine development. Three studies have been published simultaneously—two in the journal *Science* and one in the journal *Cell*—on research of so-called broadly neutralizing antibodies (BNAs) against HIV.

In one study published in *Science*, researchers designed a complex of molecules that was able to elicit BNAs in rabbits and monkeys infected with a difficult-to-neutralize strain of HIV. The molecular complex the scientists created evokes a part of HIV that binds to immune cells. Historically, it has been difficult to create such a facsimile of this portion of the virus.

In the study published in *Cell*, researchers showed that an HIV vaccine would likely need to expose the immune system to one variety of protein in order to prompt the body to develop a potential BNA against the virus; and then, later on, the vaccine would need to introduce a different protein to help the immune system develop a more mature form of that antibody.

In the other study published in *Science*, researchers gave an engineered protein to mice that prompted B immune cells to produce antibodies that are precursors to the so-called VRC01 antibody, which has been found to neutralize many strains of HIV.

To read the press release (which incorrectly describes this as an “AIDS vaccine,” rather than an HIV vaccine), [click here](#).

<http://www.prnewswire.com/news-releases/aids-vaccine-candidate-successfully-primed-immune-system-in-animal-models-300101533.html>

To read the first science study abstract, [click here](#).

To read the cell study abstract, [click here](#).

To read the second science study abstract, [click here](#).
