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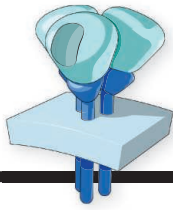
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dx.doi.org/10.1126/science.aaa4019

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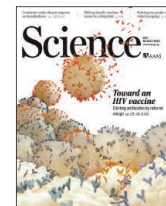
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ON THE COVER



A goal in HIV research is to design a vaccine that will protect against the rapidly mutating virus. Such a vaccine would elicit B cells to produce broadly neutralizing antibodies with

a high affinity for the HIV envelope protein. Pictured here are B cells displaying colored antibodies; B cells in the foreground express unmutated antibodies of varying specificities. Over time, the right mutations take place to create the lineage of the sought-after antibody (lineage depicted by orange-red gradient, with the unmutated ancestor depicted in orange). This happens in some HIV patients naturally, but now scientists have immunized animals with engineered immunogens that prime a first step on the antibody mutation pathway. See pages 139, 154, and 156.

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