

Peptides for HIV-1 Infection Detection Assay for Seroconverted HIV-1 Vaccine Recipients

FDA researchers identified peptides useful in the diagnosis of HIV infection. These peptides can specifically bind antibodies against HIV infection, distinguishing against antibodies elicited in response to an HIV vaccine. The increasing complexity of HIV-1 vaccine candidates has resulted in the vaccinated testing positive with currently licensed HIV-1 detection assays. Vaccine recipients may be falsely diagnosed as HIV positive and face a range of social and economic harms (e.g. employment, insurance, recruitment to the armed forces, travel, immigration, blood donations). These peptides are useful as serodiagnostic reagents to distinguish between HIV infected individuals and individuals participating in HIV vaccine trials.

Potential Commercial Applications

- Diagnostic peptides to detect HIV infection
- Peptides can distinguish between HIV infection and individuals participating in HIV vaccine clinical trials

Competitive Advantages

- These peptides can be used in HIV vaccine trials to help establish vaccine effectiveness vs. failure
- Will reduce stigmatization of healthy vaccine trial participants and improve recruitment efforts
- May be useful in blood collection centers in order to accept appropriate blood donors (uninfected vaccine recipients)
- Support blood supply when HIV vaccines are licensed

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Publications: Khurana, S., et. al. HIV-Selectest enzyme immunoassay and rapid test: ability to detect seroconversion following HIV-1 infection. *J Clin Microbiol.* 2010;48(1):281-285. PMID: [19906903](#)

Intellectual Property:

- United States Patent No. [7,888,003](#) issued 02.12.2011
- United States Patent No. [8,722,324](#) issued 05.13.2014
- Corresponding international patent applications filed, and patents issued

Product Area: HIV diagnostic, post-HIV vaccine diagnostic

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