Chicken immunization with KLH-gp120 fragment (254-274) conjugate.

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ABSTRACT

Chicken immunization with peptides is ineffective if only just the peptides are being inoculated. However, to make the immune response effective the fragment 254-274 of HIV-1 was conjugated with a carrier protein (KLH) that produced a critical immune response, assessed by ELISA, Immunoblot analysis and dot blot [1-4]. The Polson method (1990) can be used effectively to separate the IgY antibody from the egg yolk of immunized chickens [5].

References


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Two healthy layer chickens (brown Leghorn), aged approximately 6 months, are injected intramuscularly at multiple sites on the breast with the peptide-keyhole limpet hemocyanin (KLH) conjugate.

The chickens are immunized on day 0, with 0.2 µmol/ml of the fragment 254-274 of HIV gp120-conjugated to KLH (immunogen) in 0.5 ml complete Freund’s adjuvant (Sigma-Aldrich Co, St. Louis Missouri).

On days 15, 60, and 90 chickens are immunized with 0.2 µmol/ml of the immunogen in 0.5 ml incomplete Freund’s adjuvant (Sigma-Aldrich Co, St. Louis Missouri).

The eggs are collected post-immunization. The immunoglobulin Y is separated using the Polson method (1990).

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