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(71) **Applicant** *(for all designated States except US)*: **BAYLOR RESEARCH INSTITUTE** [US/US]; 3434 Live Oak Street, Suite 125, Dallas, TX 75204 (US).

(72) **Inventors; and**

(75) **Inventors/Applicants** *(for US only)*: **BANCHEREAU, Jacques, F.** [FR/US]; 6730 Northaven Road, Dallas, TX 75230 (US). **ZURAWSKI, Gerard** [AU/US]; 7620 Jordan Lane, Midlothian, TX 76065 (US). **FLAMAR, Anne-laure** [FR/US]; 8650 Southwestern Blvd. #3914, Dallas, TX 75206 (US). **COBB, Amanda** [US/US]; 7150 E. Grand Ave. #102, Dallas, TX 75223 (US). **MEAD, Holly** [US/US]; 2316 Compton Dr., Plano, TX 75025 (US). **MONTES, Monica** [CO/US]; 3005 Bryan St. #2313, Dallas TX 75204 (GB).

(74) **Agent**: **CHALKER FLORES, L.L.P.**; 2711 LBJ Freeway, Suite 1036, Dallas, TX 75234 (US).

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(54) **Title**: HIV VACCINE BASED ON TARGETING MAXIMIZED GAG AND NEF TO DENDRITIC CELLS

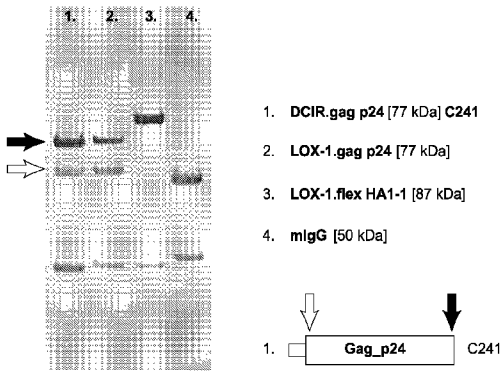


FIG. 1

(57) **Abstract**: The present invention includes compositions and methods for making and using a vaccine that includes a DC-specific antibody or fragment thereof to which an engineered Gag antigen is attached to form an antibody-antigen complex, wherein the Gag antigen is less susceptible to proteolytic degradation by eliminating one or more proteolytic sites or a DC-specific antibody or fragment thereof to which an engineered Nef antigen is attached to form an antibody-antigen complex, wherein the Nef antigen comprises one or more codon usage optimization that increase antibody-antigen complex secretion, or both, wherein the vaccine is able to elicit an HIV-specific T cell immune response to Gag p17, Gag p24, Nef and/or Cy clin D1.

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