Elicitation of broadly neutralizing Ab (bNAb) responses toward the conserved HIV-1 envelope (Env) CD4 binding site (CD4bs) is a critical objective for the prevention of human immunodeficiency virus type 1 (HIV-1) infection. Here, we report that immunization of mice with gp120-CD4-Induced Antibody Complex (gp120-CD4i) fusion proteins with selective glycan deletion as immunogens could focus Ab response toward CD4bs epitope.