Induction of broadly neutralizing antibodies (bnAbs) is a goal of HIV-1 vaccine development. Antibody 10E8, reactive with most of the neutralization-sensitive regions of gp120, was used to isolate and clone memory B cells that secrete chimeric antibodies of memory B cell and plasma antibodies. These chimeric antibodies were then used to identify a bnAb that potently neutralized most HIV-1 strains.