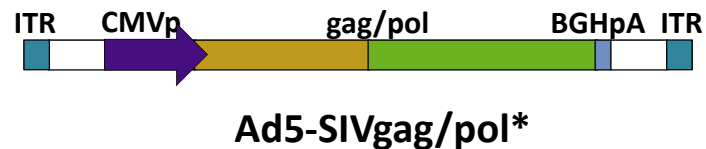
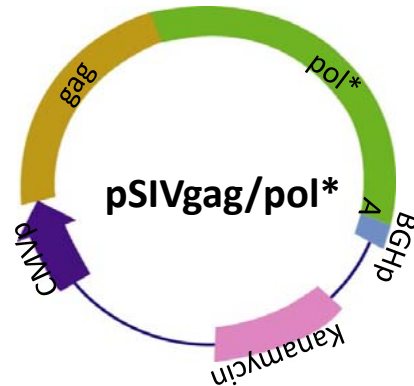


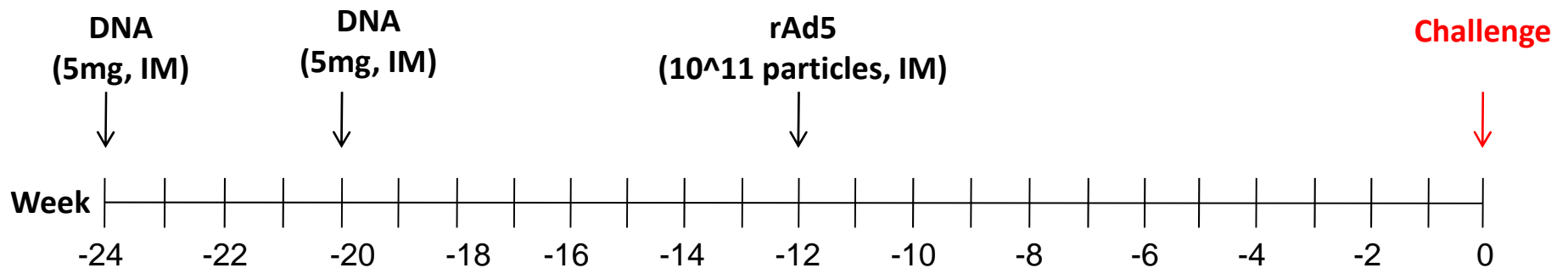
**Supporting Digital Content 1.** Vaccine construct, vaccination and challenge schedules. (A) Diagram of the DNA and rAd5 vectors. The SIV gene insertion sites are indicated by the flanking promoters and stop codons. (B) Schedule for vaccination, and (C) dose and frequency of SHIV challenge.

**A.**

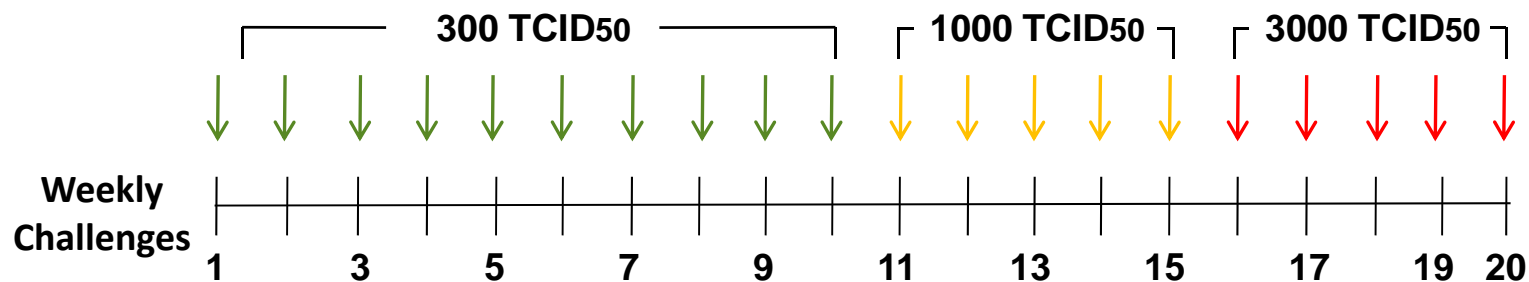


\* SIV pol with truncations at both N- and C-termini

**B.**

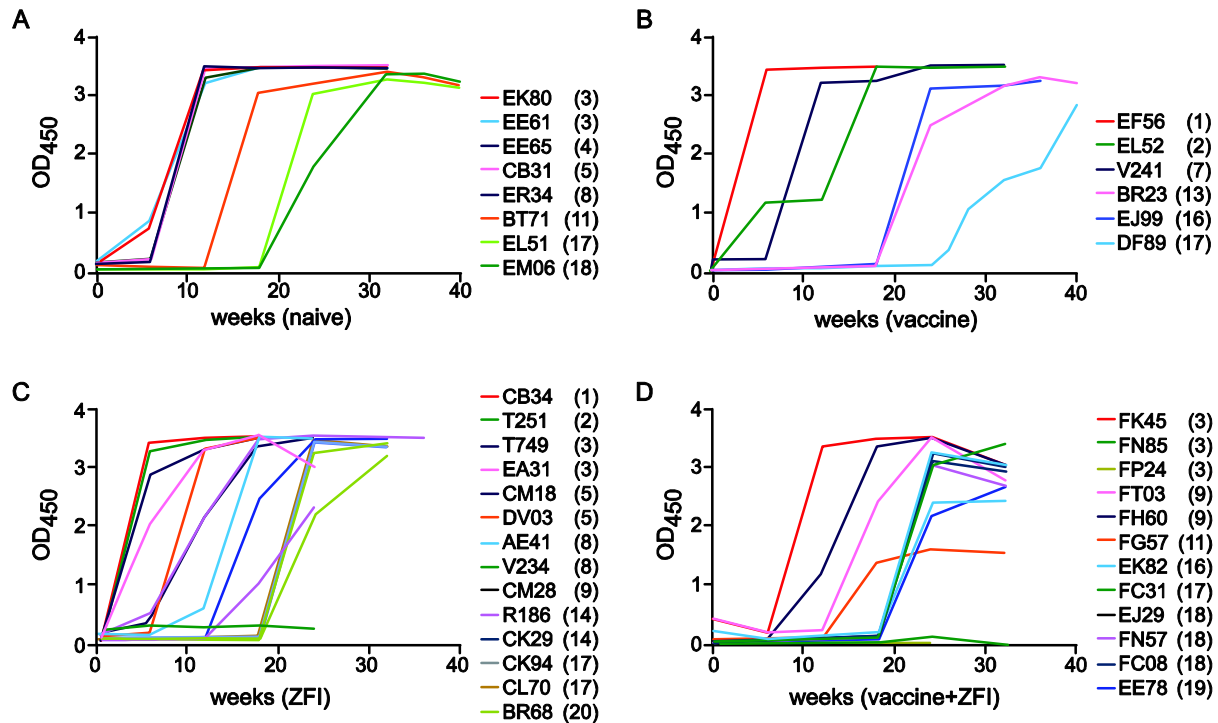


**C.**



## Supporting Digital Content 2. Anti-SHIV gp120 antibody responses in infected macaques.

HIV-1 gp120-specific binding IgG antibodies were measured by ELISA using a 1:10 dilution of plasma. Envelope reactivities are presented as OD450 values, with pre-infection values subtracted. Macaque V234 in the ZFI-treated group (panel C) tested negative by ELISA because of high non-specific binding background, but found to seroconvert by Western Blot analysis. Macaques FN85 and FP24 in the combination group (panel D), however, tested negative in both assays.



### Supporting Digital Content 3. Effect of MamuA\*01 allelic expression on SHIV replication.

Scatter plots of peak viremia (A) and RNA levels during the first 20 weeks of infection (AUC20) (B) viremia in MamuA\*01 positive and MamuA\*01 negative macaques infected in the presence of the ZFI-microbicide or a combination of the ZFI-microbicide and vaccine are shown. The line represents the median of each group.

