

HIV-dependent depletion of influenza-specific memory B cells impacts B cell responsiveness to seasonal influenza immunisation

Adam K Wheatley*^{1,3}, Anne B Kristensen¹, William N Lay¹ and Stephen J Kent^{1,2,3}

¹ Department of Microbiology and Immunology at the Peter Doherty Institute for Infection and Immunity, The University of Melbourne, Melbourne, Australia

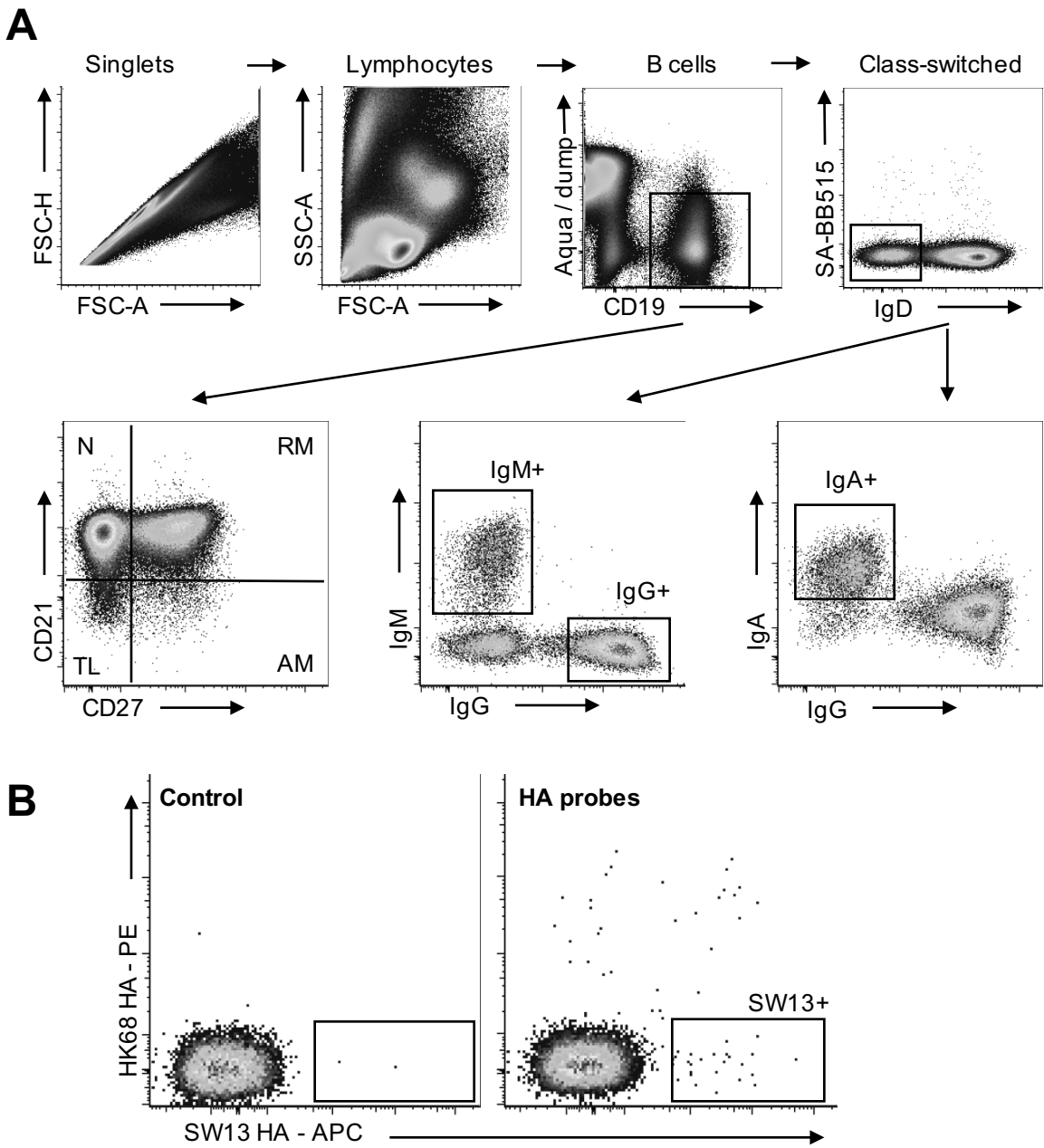
² Melbourne Sexual Health Centre and Department of Infectious Diseases, Alfred Health, Central Clinical School, Monash University, Melbourne, Australia

³ ARC Centre of Excellence in Convergent Bio-Nano Science and Technology, University of Melbourne, Parkville, Australia

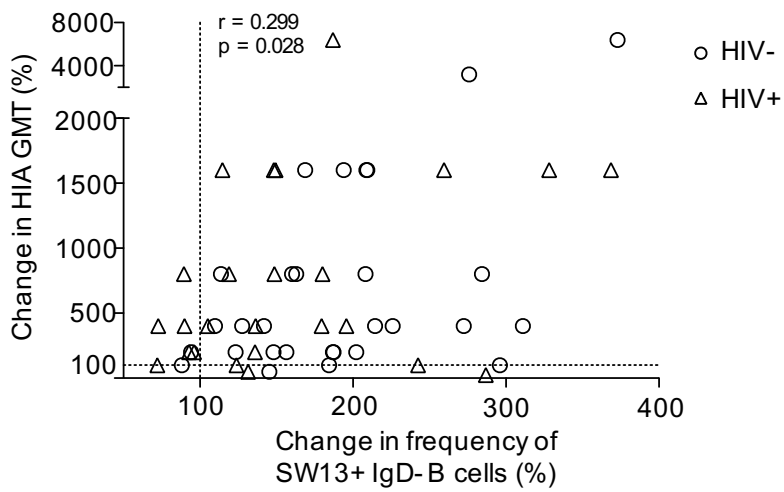
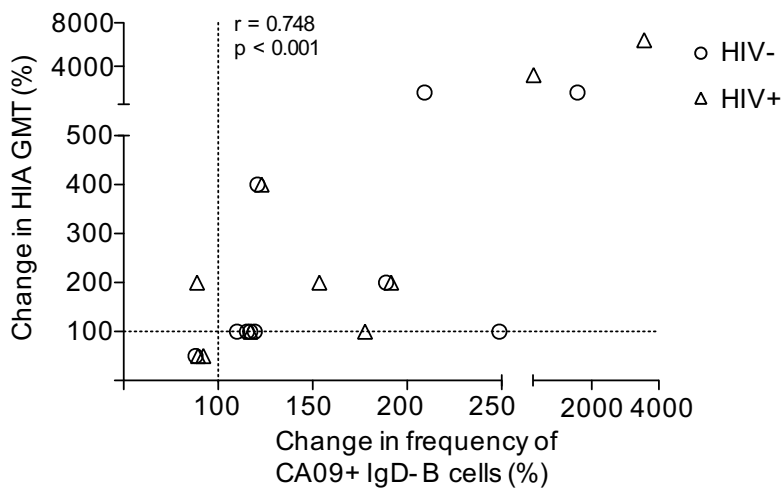
***Corresponding Author:** AK Wheatley, Department of Microbiology and Immunology, University of Melbourne at the Peter Doherty Institute for Infection and Immunity, 792 Elizabeth Street, Melbourne VIC 3000, Australia.

Tel.: +61390354179; fax: +61 383445740;

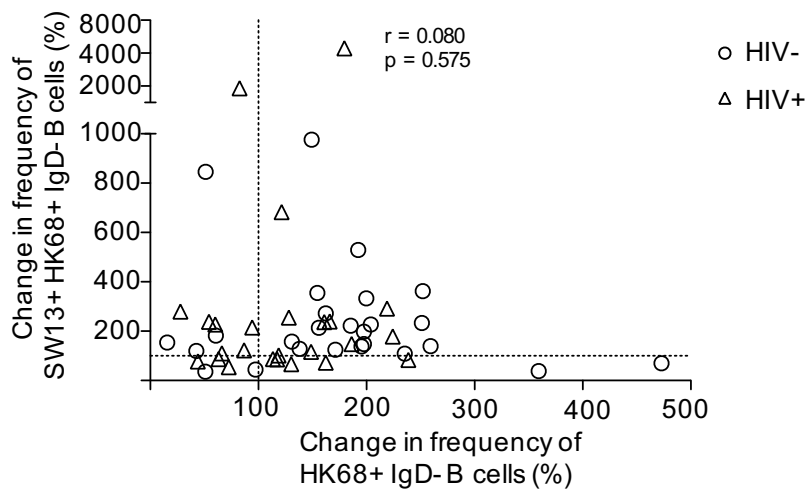
E-mail address: a.wheatley@unimelb.edu.au



Supplementary Figure 1. Representative flow cytometry gating. **(A)** The phenotype of single, live CD19⁺ B lymphocytes was assessed using surface markers CD21 and CD27. CD27⁻ CD21⁺ naïve (N), CD27⁺ CD21⁺ resting memory (RM), CD27⁺ CD21⁻ activated memory (AM) and CD27⁻ CD21⁻ tissue-like populations (TL) are denoted. Surface immunoglobulin expression was determined by co-staining for IgG, IgA and IgM subclasses. **(B)** Class-switched B cells not binding decoy streptavidin-BB515 (SA-BB515) were co-stained with recombinant HA probes. Positive gates were established with reference to cells stained with control probes (SA-conjugates alone).

A**B**

Supplementary Figure 2. Correlations between IIV3-elicited changes in (A) SW13+ or (B) CA09+ memory B cell frequencies and HI activity (GMT).



Supplementary Figure 3. No correlation between post-IIV3 expansions of HK68+ and HK68+SW13+ memory B cells.