Supplemental Figure 1

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Supplemental Figure 1: Confirmation of BrdU uptake by developing BM B cells

(A) FACS plots showing gating of B cell developmental subsets in representative C57BL/6 mouse (left), and BrdU labeling of B220⁺IgM⁻ pro-/pre-B cells and B220⁺IgM⁺ immature B cells populations (right). Number indicates % BrdU positive. (B) % BrdU positive B cells in IgM⁻ and IgM⁺ subsets of B220⁺ BM B cells in aged female (black) and autoimmune WAS chimera (grey) mice. Open circles indicate BrdU uninjected controls. Each data point indicates an individual animal, pooled from two independent experiments. ****, *P*<0.0001; by unpaired two-tailed Student's *t* test.

Supplemental Figure 2



Supplemental Figure 2: Malaria-specific IgM memory B cells exhibit reduced autoreactivity compared with naive FM B cells.

(A) ELISA serial dilution curves showing reactivity of mAb cloned from single FM and anti-MSP⁺IgM⁺ memory B cells (tetramer sorted from *Plasmodium chabaudi* infected mice at 100 days post-infection) towards autoantigens DNA, Sm/RNP, and phosphorylcholine (PC-10). (B) Cloned mAb reactivity by calculated AUC of autoantigen ELISA dilution curves. Each data point indicates an individual mAb. (C) Percentage of mAb reactive to specific autoantigens. (AUC cutoff defined as value 2x greater than the median AUC for all samples; blue=reactive clones, gray=nonreactive clones; numbers within pie chart indicate percentage reactive clones and total number of clones tested).

Supplemental Figure 3



Supplemental Figure 3: Phenotype of CD11c microbead enriched splenocytes

(A) Representative FACS plots showing the proportion of CD19⁺ B cells expressing the surface markers CD11b and CD11c. Upper panels: pre-enrichment splenocytes from Q β -VLP immunized mice. Lower panels: splenocytes post-CD11c enrichment. (B) Proportion of VLP-specific B cells within the CD11b⁺CD11c⁺ gate in pre- (upper panels) and post- (lower panels) CD11c-microbead enrichment. (A, B) Number indicates percentage within gate. (C) % CD11b⁺CD11c⁺ cells among total CD19⁺ B cells (left) and VLP-specific B cells (right) pre- (white) and post- (black) CD11c enrichment. *****, *P*<0.0001, by two-tailed Student's T test. (D) Histograms showing cell size (forward scatter, FSC), granularity (side scatter, SSC), and surface CD21 and CD23 expression on CD11b⁺CD11c⁺ B cells (black line) relative to CD11b⁻CD11c⁻ non-ABCs (grey) in CD11c-enriched splenocytes from Q β -VLP immunized mice.